

## **Historic, Archive Document**

Do not assume content reflects current  
scientific knowledge, policies, or practices.



## The NAL and AgNIC Internet Web Sites

### NAL Home Page on the World Wide Web

by Joseph N. Swab and Michael E. Thompson, NAL  
with contributions by Stephen Rose

In mid-April 1995 the NAL World Wide Web Home Page Prototype Committee announced to the National Agricultural Library staff that the library's home page was available on the Internet World Wide Web at the URL:  
<http://www.nal.usda.gov>

Getting to that point and progress since then has been like riding in a whirlwind, fast and furious with a lot of chaos, but out of that process has come an information source detailing what the National Agricultural Library is, what its services and products are, and how to access and use agricultural information. In early 1996, NAL's and several of its Information Centers' home pages were rated in the top 5% by several reviewers [See box on page 2]. But NAL is neither stopping at these achievements nor resting on these accolades; the process of improving the home page and adding new features continues with the announcement on March 1, 1996, of ISIS (NAL's Online Public Access Catalog and Journal Article Citation database) on the Internet and its linkage to the NAL's home page.

(See HOME PAGE, page 2)

### Agricultural Network Information Center (AgNIC)

by Richard E. Thompson  
Information Systems Division, NAL

On December 5, 1995, a pilot Agricultural Network Information Center (AgNIC) was established on the Internet. The URL for the AgNIC World Wide Web Home Page is:

<http://www.agnic.org>

The first screen is shown at Figure 1 on page 7.

AgNIC provides a focal point for accessing agriculture-related information and was established through National Agricultural Library collaboration with several land-grant universities and some of the Research, Education, and Extension (REE) agencies of the U.S. Department of Agriculture (USDA).

A key component of the National Agricultural Library's strategic planning included an examination of the issues associated with NAL's ability to manage and store agriculture-related electronic information. NAL has long recognized that collaboration and resource sharing among institutions with a common interest in agriculture is essential,

(See AgNIC, page 6)

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By the end of 1994, the Director and management team of the library and its Electronic Information Initiative (EII) committees had determined that technology advances and information management concerns behooved the library to begin putting new information destined for the Internet into the World Wide Web and linking to a library home page the information NAL had already placed on the Internet through a variety of methods with cooperative organizations. To accomplish this mandate an NAL World Wide Web Home Page Prototype Committee was formed under the aegis of the library's Electronic Information Initiative Steering Committee in January 1995. The Web Committee, which began its work as a library-wide effort in February 1995, consisted of representatives from all of the library's divisions and branches and included persons with experience preparing material for Internet access. The NAL World Wide Web Home Page Prototype Committee members were: Peggy Blake, Dan Cabirac, Stacey Cole, Sherry Davids, Sandy Facinoli, Martha Feldman, John Gladstone, Joseph Makuch, Wayne Olson, Susan Phelps, Stephen Rose, Joseph Swab, and Mike Thompson, Chairman.

The Web Committee's charge was to develop a prototype home page for the NAL World Wide Web (WWW) server. The 13 members, whose experience with WWW ranged from novice to advanced, consulted many on-line training sites and printed works on the hypertext markup language. The Committee also looked at a substantial variety of other Web sites for ideas and desirable elements.

Originally, the focus was to develop a page that was easy to load, contained a minimum number of graphics with few colors, was compatible with a wide variety of browsers, and adequately reflected the organization. The Committee vigorously debated the use of library specific terminology and whether to make the page "organizationally transparent." It was also soon realized that the entire library must participate in the upkeep

## NAL's WWW Home Pages Rated Tops

The National Agricultural Library's and several of its Information Centers' home pages have recently been given top ratings in three different ratings sources. Recently, NAL's home page was given a 3-star rating by Magellan, while the Biotechnology Information Center and the Agricultural Genome Information Server were each given the 4-star, i.e., highest, rating. The Food and Nutrition Information Center (FNIC) received notice from David Brake in March 1996, that the FNIC home page has been chosen by *New Scientist* for a listing in its Hot Spots section. Earlier, in January, Todd Whitney, Director of Network Relations at Point Communications, informed the National Agricultural Library that the Point Survey had rated NAL's and the Food and Nutrition and the Alternative Farming Systems Information Centers' World Wide Web home pages "among the top 5% of all sites on the Internet." According to Whitney, Point "rates and reviews only the best sites on the World Wide Web," and it provides "surfers with a standard of excellence: a catalog of the most lively, useful, and fun sites on the Net."

—Joseph N. Swab

of the Web site, and that a definitive statement from NAL management in support of using the Web as the primary means for disseminating digital information was needed.

The prototype presented to the EII Implementation Team (EIIIT) had one 16 color graphic as a masthead or banner, categories on general information, NAL services and products, a small listing of other Internet sites, and an E-mail address for feedback.

After review by the EIIIT, the focus was redirected toward a more user-friendly and aesthetically appealing design with only a slight increase in the use of graphics. Committee members reworked the banner with more colors, and added, at the bottom of the page, a graphic showing the USDA seal and the ARS and NAL logos.

The number of categories was expanded and clickable buttons were added as complements. Members rewrote the accompanying text to provide a clear concise description of the information on the levels below. New lower level pages were created and existing ones revised to reflect the new direction.

The NAL WWW server was officially on-line as of April 19, 1995, and announcements were sent to various locations for registration. After making further refinements to

the home page (see pages 3 and 5 for sample pages), the NAL World Wide Web Home Page Prototype Committee submitted its "Final Report" on June 9, 1995.

The "Final Report" included the following recommendations; to each has been added the status as of the writing of this article for *ALIN*:

- Appoint a standing committee to develop policies and procedures. Status: Web Management Team appointed.
- Designate staff in each branch/area as responsible parties for maintenance of the individual sections. Status: HTML liaisons appointed in each branch of NAL.
- Train staff in basics of HTML (Hyper Text Markup Language) for document production. Status: In progress.
- Train staff in file transfer and editing of live documents (i.e., those already on the server). Status: In progress: over 80 staff members have received in-house training.
- Obtain and configure a statistics program. Status: Completed.
- Create a "mail to" option and forms for queries, feedback, document delivery, etc., working with other





## Welcome to the National Agricultural Library

The National Agricultural Library (NAL), part of the Agricultural Research Service of the U.S. Department of Agriculture, is one of four National Libraries in the United States. NAL is a major international source for agriculture and related information. This Web site provides access to NAL's many resources and a gateway to its associated institutions.

Message from the Director, Pamela Q. J. André



### General Information

A description of NAL's collections, products and services, its mission statement, visitor information, and staff locator.



### Answers to Your Questions

How to obtain answers to general reference questions and get help from NAL's 10 specialized information centers.



### How to Access the Collection

NAL's on-line collection of agricultural images, guidelines on obtaining and donating materials, and other information products.



### ISIS

How to Access ISIS, NAL's Online Public Catalog and Journal Article Citation Database.



### Internet Sites

Explore other internet sites relating to agriculture, government, library services, and more, including Search Tools

NAL's gopher and Internet



*The National Agricultural Library*

*March 1, 1996*

[webmaster@nal.usda.gov](mailto:webmaster@nal.usda.gov)

[<http://www.nal.usda.gov>](http://www.nal.usda.gov)

NAL's Home Page on the World Wide Web. [In full color; appearance varies with software.]

USDA agencies that have already implemented these features. Status: Partly done, being refined.

- Follow guidelines developed by the NAL Internet Information Policy Committee and the USDA *Departmental Regulation on Home Page Development and Maintenance (DR-3430-1)* in the creation of NAL-specific policies and guidelines. Status: In progress.
- Add WAIS and other text search tools. Status: In progress.
- Add lynx to the server to accommodate non-graphical access. Status: Completed.
- Standing committee should design a process to update the home page and secondary pages. Status: In progress.

Shortly after the announcement of NAL's presence on the Web in Spring 1995, the EII Implementation Team (EIIIT) created a Needs Assessment Committee with Joseph Makuch, Diane Doyle, and Stephen Rose as members. This committee was asked to determine the requirements for staff to create and manage documents on NAL's Web server, and to determine the various levels of knowledge and skills available among NAL staff and to what degree training would be necessary.

Subsequently, the EIIIT created a Web Management Team with Mike Thompson and Ray Dobert as co-chairmen; other members were Stephen Rose, John Kane, and Sherry Davids. This team is responsible for developing NAL policies and recommendations for creating and managing documents, style guidelines, minimum requirements for pages, links, and HTML verification. It has been examining various policies and guidelines of other libraries, Federal agencies, and organizations. The Team has also assured compliance with USDA guidelines for home pages, and with ARS home page policy, and is using all of these tools to develop an NAL style manual and guidelines tailored to NAL's needs. The Web Management

Team is also responsible for reviewing security issues, for developing security policy, and for maintaining security. It is also concerned with developing search engines and fill-in forms. Some library units already have such fill-in forms for requesting information or to send comments back to NAL. Other library units also have indexed their pages, and the documents or files linked to them can now be searched; among these are the Food and Nutrition, Plant Genome, and Technology Transfer Information Centers. The Web Management Team is also charged with cooperating with ARS and other USDA agencies, helping them with development of their policies, home pages, document management, etc.

In May 1995, members of the Web Committee began demonstrating NAL's home page to library staff, and thereafter more intense training in accessing and using the World Wide Web began. By March 1996 many of the library staff had also been trained in HTML coding of documents and Web authoring. Two workstations (labs) for Web authoring have been set up in the library. Equipment and software throughout the library have been upgraded to the minimum requirements for desktop access to the Web at every workstation.

In the Fall of 1995, each division or branch of the library designated HTML liaisons. They are responsible for actual document management on the Web and each has an account on the server itself. This responsibility is not limited to mark up of documents, but requires skill in Unix commands for file manipulation. The liaisons are aware that documents on the NAL Web server are viewed by the world, and take pride in the manner in which NAL is presented to anyone with Web access. A number of library branches or units and all of the library's information centers now have their own home pages linked to the NAL home page.

The Web Management Team has also created a local news group and a listserv to keep users informed of new developments, new and interesting sites, tips and tricks, and so forth.

Other EII related committees and groups have been formed and some have ties to the Web activities. For example, the Electronic Resources Selection Council consisting of Ellen Pletsch Hamilton, Julie Mangin, Rae Dubois, Win Gelenter, Barbara Buchanan, Eileen McVey, and Emily Wyman, is searching the Internet for catalogable resources in subjects within NAL's scope. A related committee, the Electronic Media Selection Committee, is locating media in electronic/digital form (CD-ROM's, for example) for acquisition through the library's gift and exchange program or through purchase.

In addition NAL has a Digital Core Initiative which is developing policies and recommendations for managing and archiving all information created or acquired by NAL in digital form. It is intended that future documents will be coded in SGML (Standard General Markup Language) in the preparation stage, enabling them to be used for a variety of media, including the Internet World Wide Web.

Users around the world quickly found the NAL home page on the Web despite limited announcement of its existence while refinements were being made (as they are still). Statistics on use have been kept almost since the beginning of the home page. For example, NAL was experiencing an average of 33,000 accesses per month until December 1995. In January 1996, largely because of the on-line version of *Dietary Guidelines for Americans*, server accesses jumped to 123,439.

Plans for further development of the NAL Web site include development of server-wide indexing (in progress through experimentation with various search engines), reorganizing the server's directory hierarchy, and installing maintenance tools such as robots and spiders.

The contents of NAL's Web pages are constantly changing, but a selective list of features is shown in the box on page 6 of this issue of *ALIN*. A few of these features, such as AgNIC, ISIS, and ALIN itself, are covered in more



## ? Answers to Your Questions

### ● General Reference Services

Find out how to obtain agriculture-related database searches and information products including bibliographies, resource guides, and fact sheets. Access to experts and organizations is also provided.

### ● Information Centers (listed below)

NAL has 10 subject specific information centers that provide customized services to the agricultural community and others. Through the Internet, the centers provide access to digital information including images, databases, software, patents, bibliographies, and resource guides. They also provide subject matter expertise and perform extensive outreach and collaborative activities.



[Agricultural Trade and Marketing Information Center](#) (ATMIC)



[Alternative Farming Systems Information Center](#) (AFSIC)



[Animal Welfare Information Center](#) (AWIC)



[Aquaculture Information Center](#) (AIC)



[Biotechnology Information Center](#) (BIC)



[Food and Nutrition Information Center](#) (FNIC)



[Plant Genome Data and Information Center](#) (PGDIC)



[Rural Information Center](#) (RIC) and [RIC Health Service](#) (RICHS)



[Technology Transfer Information Center](#) (TTIC)



[Water Quality Information Center](#) (WQIC)

Return to:

[NAL Homepage](#)



A portion of one of the secondary pages linked to NAL's Home Page on the World Wide Web.

detail in other articles in this issue of *ALIN*.

**F**or additional information about NAL's home page on the World Wide Web, contact:

Michael Thompson  
Document Delivery Services  
Branch, Room 300  
National Agricultural Library  
USDA, ARS  
10301 Baltimore Avenue  
Beltsville, Maryland 20705-2351

Or call:

Telephone: (301) 504-6503  
TDD/TTY: (301) 504-6856  
Fax: (301) 504-5675  
Internet/E-mail:  
[mthompso@nal.usda.gov](mailto:mthompso@nal.usda.gov)



## NAL Home Page on the World Wide Web

The following list shows selected contents of the NAL home page and secondary pages, with some links (in *italics*) to other agencies' or organizations' pages.

*U.S. Department of Agriculture*  
*Agricultural Research Service*

Message from the Director, Pamela Q.J. André  
Text / Audio / Biography

### General Information

About the National Agricultural Library  
NAL's Mission, Values, Vision  
NAL Visitor Information (Hours, Location)  
Contacting People at NAL (Phone, E-Mail)  
List of Key NAL Personnel and Services  
About AGRICOLA (NAL's Bibliographic Database)  
Technical Services  
    Acquisitions & Serials  
    Cataloging  
    Indexing

### Answers to Your Questions

General Reference Services  
Information Centers  
    ATMIC / AFSIC / AWIC / AIC / BIC / FNIC / PGDIC /  
    RIC / TTIC / WOIC

### How to Access the Collection

Agricultural Images from Special Collections  
Document Delivery (How to Get NAL Materials)  
Gift & Exchange Program (How to Donate Materials to NAL)  
Government Documents  
Other NAL Information Products  
    [This includes all other NAL Publications including the news-  
    letter, ALIN, the Annual Report, and other media]  
Other Agricultural Publications & Information

ISIS (How to access ISIS, NAL's Online Public Access Catalog and Journal Article Citation Database)

### Internet Sites

*U.S. Department of Agriculture*  
    *USDA Economic & Statistics System (Cornell, Mann Library)*  
    *[about 2 dozen other sites]*  
*U.S.D.A. National Agricultural Library*  
    Agricultural Genome Information Server  
    Agriculture Network Information Center (AgNIC)  
    Child, Youth, and Family Education and Research Net-  
    work (CYFERNET)  
    NAL Gopher  
Agriculture-Related Sources  
    Cornell University, Mann Library, USDA Economic. and  
    Statistics System  
    *[Several dozen other sites]*

## AgNIC

(from page 1, col. 2)

since no one institution has the resources required to meet user needs. Part of this planning process included a cooperative agreement between NAL and Iowa State University (ISU), under which ISU conducted an evaluation study to identify and propose a model for an information system which could meet the need for NAL participation with other institutions to facilitate access-to and dissemination-of agriculture-related information.

The end-product of the study was a recommendation to establish a distributed Agricultural Network Information Center (AgNIC) to provide worldwide seamless access to agricultural information in electronic form, agricultural subject area experts, and other resources via the Internet and its successor networks, in a manner in which the physical location of these resources would be transparent and immaterial to users. AgNIC is envisioned to include cooperation among equal partners (independent organizations bound by a common interest), with each participant retaining its own identity and autonomy, and all areas of cooperation are voluntary. AgNIC will help users cope with the rapid growth in resource sites and the vast quantity of resources available over the Internet. It is intended to complement rather than duplicate existing systems. Although the focus of AgNIC is on agriculture-related resources, the concept could be applied equally as well to any other subject area.

### AgNIC goals are to:

- Identify major collections of information related to agriculture, subject area experts, and other resources.
- Facilitate access to and retrieval from these resources.
- Encourage organizations to collaborate in creating and using the AgNIC, while retaining ownership and responsibility for their own



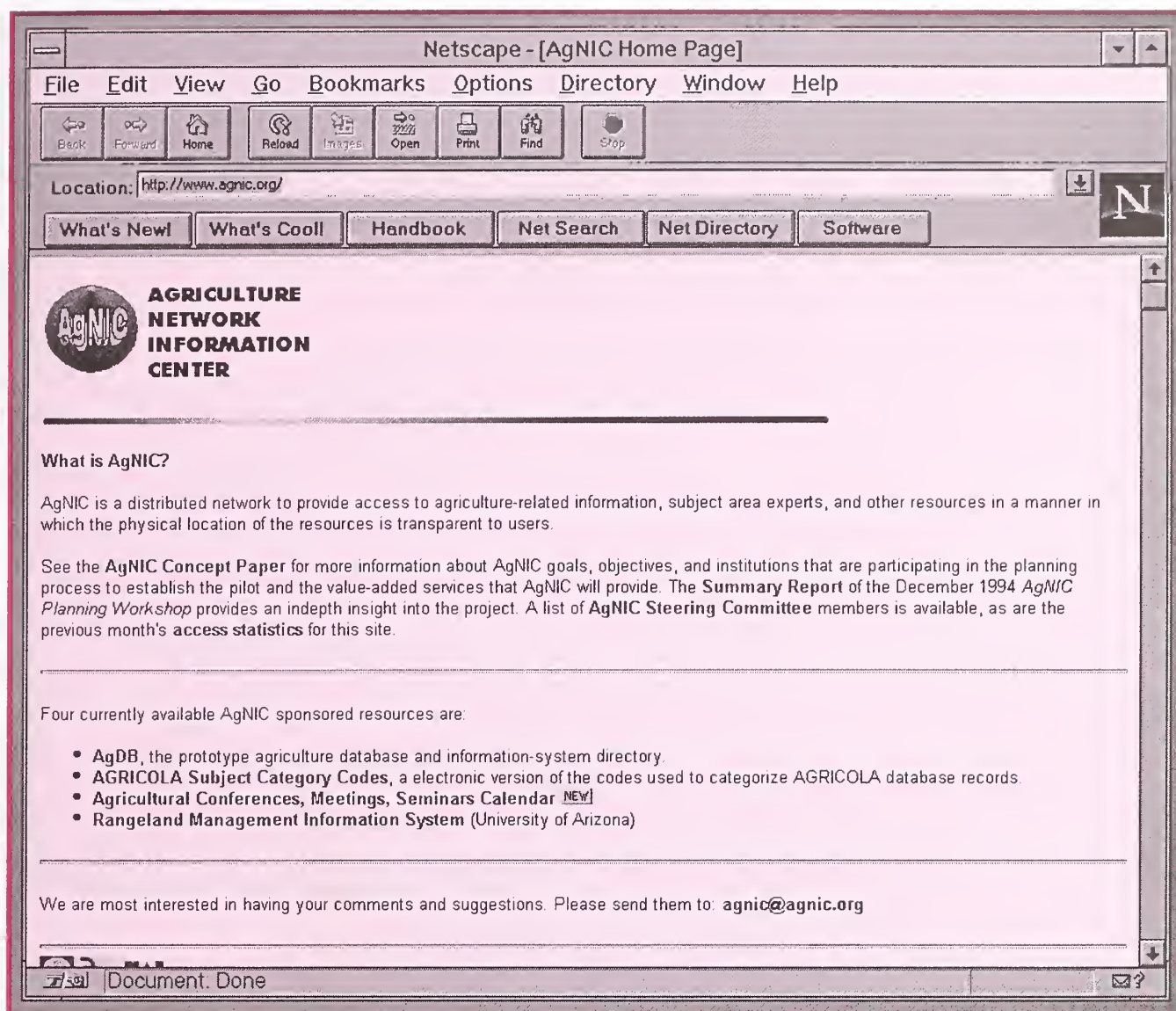


Figure 1: AgNIC Home Page

agriculture-related information to which access is provided through AgNIC.

- Leverage the distributed character of the Internet to ensure that workload and responsibility are distributed across participating sites and to use the expertise available.
- Provide a test bed for learning, experimenting, and gaining experience in Network Information Center (NIC) operations.
- Facilitate collaboration between people within the broad agricultural community.

**Value-added information services to be provided by AgNIC include:**

- A Help Desk that provides technical assistance in using AgNIC.
- Distributed reference assistance provided by librarians at participating sites and which includes an automated response system that directs individual users to their nearest library for initial reference assistance.
- Facilitate collaborative development, use, and archiving of distributed agricultural online primary resource (non-bibliographic) databases.

- Provide, in coordination with the InterNIC and other information providers, pointers to agricultural resources available on the Internet.
- Liaison activities that include sharing of information and coordination with national and international user groups, network organizations, and professional organizations.

Although AgNIC could ultimately evolve to include participation by many elements of the public and private sectors of the agricultural community, a limited number of institutions will participate in the pilot. Institutions which have had representatives parti-

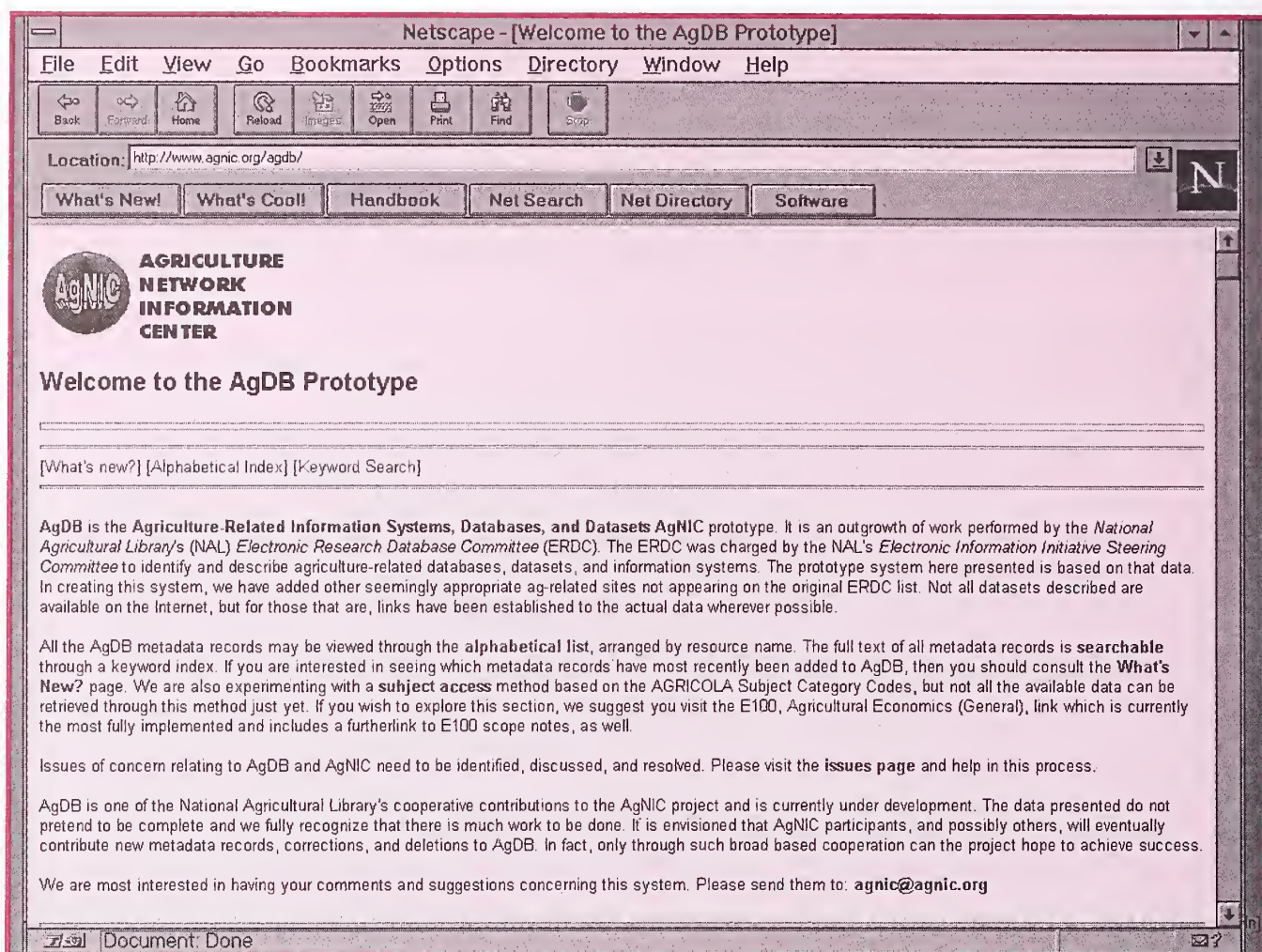


Figure 2: The first screen of the AgDB Prototype page.

cipate with NAL as the Planning Group or Steering Committee to implement the AgNIC pilot include Cornell, Iowa State, Michigan State, Oregon State, and Purdue Universities; Saint Joseph's College; the University of Arizona; the Clearinghouse for Networked Information Discovery and Retrieval; and the Canadian Agriculture Library. USDA agency participation has included representatives of the Cooperative State Research, Education, and Extension Service; the Economic Research Service; and the National Agricultural Statistics Service. Additional land-grant university participation will be sought as the pilot implementation progresses over the course of the next three years.

**A**n AgNIC Planning Workshop was held in Washington, DC,

December 4-6, 1994, to consider the issues of most concern related to the establishment of the AgNIC pilot, the services to be provided by AgNIC, how they would be provided, and to set up task forces to take the lead on the next steps required for pilot implementation. A summary of the proceedings of the Workshop are available at the AgNIC www site. Although the task forces are continuing planning for the full range of value-added services that will be provided by AgNIC, the pilot will implement the services on an incremental basis.

**T**he first value-added service to be included in the pilot is a prototype directory of databases, datasets, and information systems related to agriculture, presently referred to as AgDB (Figure 2, above) which is

an expansion of resources initially identified by NAL's Electronic Research Database Committee (ERDC). The AgDB prototype is the first step toward a collaborative effort to develop a more comprehensive quality-validated directory of primary (non-bibliographic) resources. An **Issues Page** has been included to solicit comments and recommendations that will help identify, discuss, and resolve issues of concern related to development of AgDB.

AgDB contains metadata descriptions of primary agriculture resources that are available through the public and private sectors. In those instances where the resources are available over the Internet, hypertext links to the resources are included. An example of a metadata description of an information



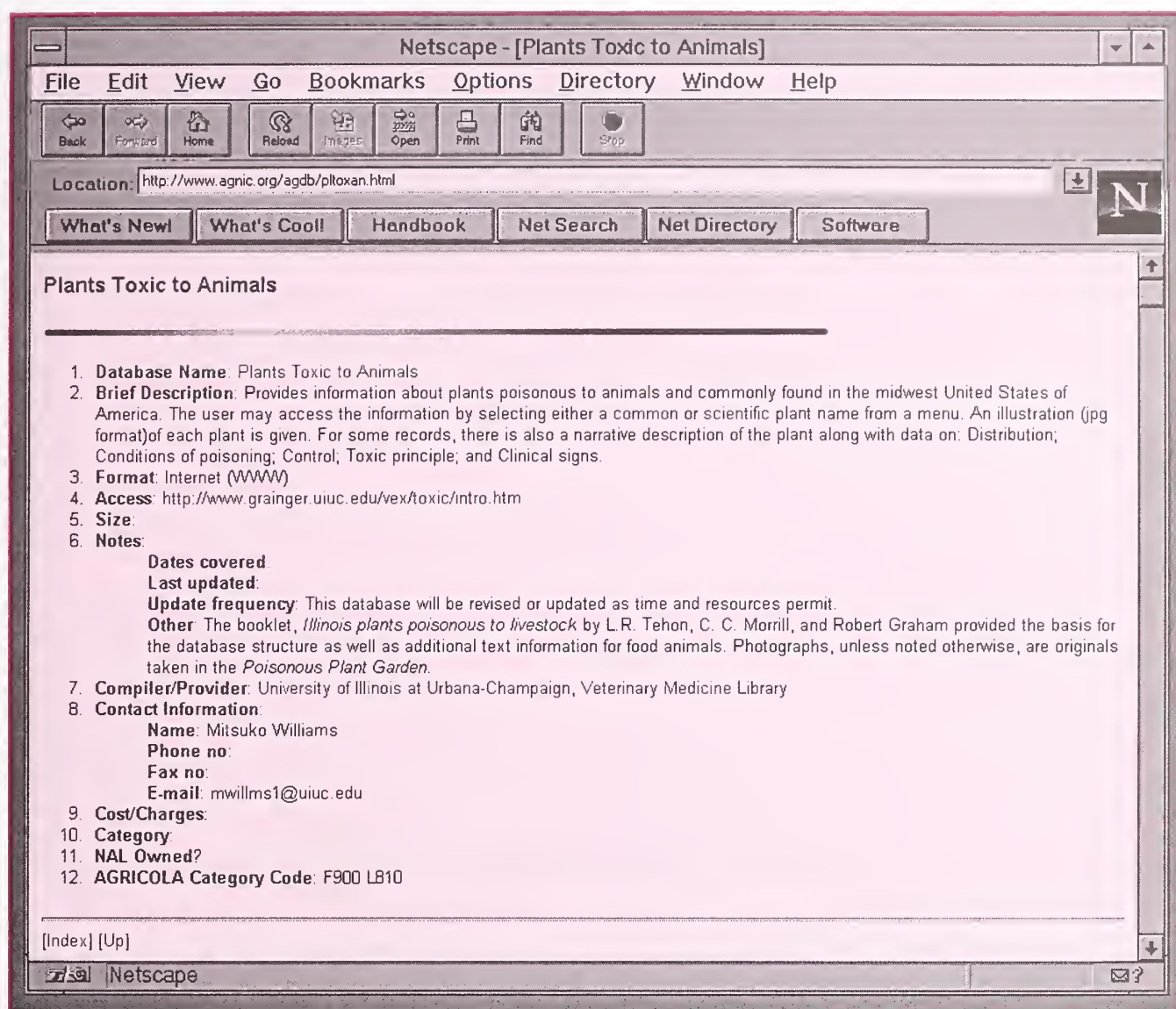


Figure 3: Description of an information system in the AgNIC directory.

system included in the directory is at Figure 3 (above). The metadata records may be viewed through the alphabetical list, arranged by resource name (Figure 4, on page 10). The full text of metadata records is also searchable through a keyword index. The search form is shown at Figure 5 (on page 11). If users are interested in seeing which metadata records have most recently been added to AgDB, they can consult the **Whats New?** page (Figure 6, top of page 12).

We are also experimenting with subject access to AgDB using the AGRICOLA Subject Category Codes (Figure 7, bottom of page 12), but not all the

available data can be retrieved through this method at this time. The codes are used by NAL indexers and catalogers to categorize bibliographic records in the AGRICOLA database. Users already familiar with the subject category codes who have browser table capability may use the by-code table access provided by clicking on the appropriate subject category code. Users unfamiliar with the codes or who do not have browser table capability may use the alphabetical subject category title that follows the table.

The next value-added service — to be added to AgNIC in February 1996 — is a directory of human resour-

ces, or experts in agriculture-related subject areas. Directories of experts in these disciplines have begun to appear on the Internet. The directories vary from modest, low budget, narrowly focused efforts, through more technologically sophisticated implementations, all the way to highly ambitious, multi-disciplinary, limited-access projects. AgNIC will provide a focal point to help users identify and obtain access to these distributed resources.

A task force, led by the Dean of Libraries at Iowa State University, met at the American Library Association Mid-winter Conference in January 1996 to plan for the implemen-



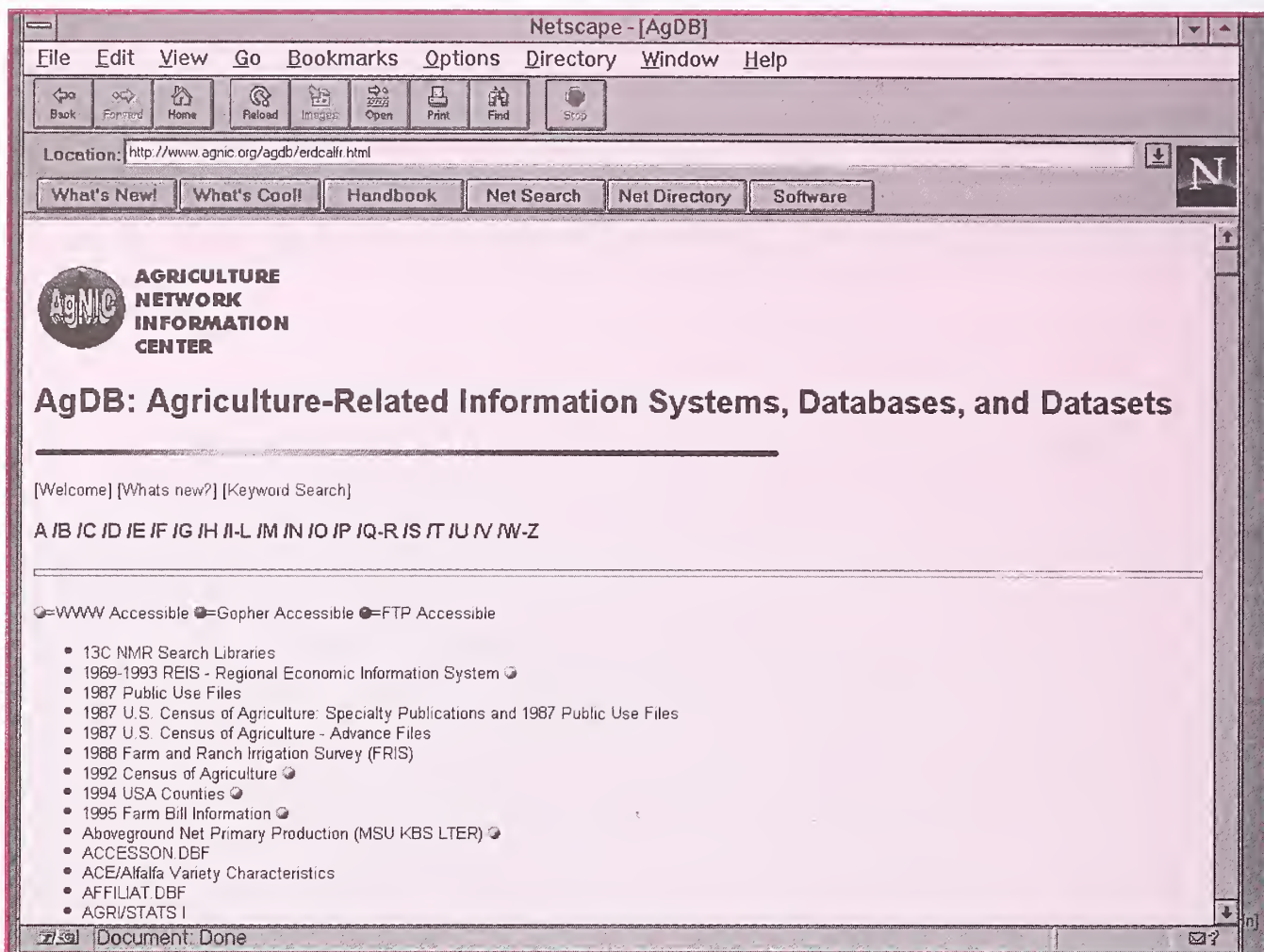


Figure 4: The first screen of the AgDB alphabetical resource list in AgNIC.

tation of a distributed mediated library-library reference assistance service through AgNIC. Cornell University, the National Agricultural Library, and the University of Arizona also have members of their library staffs participating on the Task Force. Follow-up planning meetings are scheduled to be held at NAL in February and March 1996.

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 Internet: rthompson@nal.usda.gov

## The Agricultural Network Information Center (AgNIC) Concept

by Richard E. Thompson

The Agricultural Network Information Center (AgNIC) is a source of agricultural information in electronic form over an international network of networks. Agricultural information includes basic, applied, and developmental research, extension, and teaching activities in the food, agricultural, renewable natural resources, forestry, and physical and social sciences. AgNIC will provide seamless access to

distributed sources of agricultural information, subject area experts, and other resources in a manner in which the physical location of these resources is transparent to the user.

The nature of information resources is changing rapidly as a result of new information technologies and the advent of networking via the Internet. The proliferation of sources for digital information, advances in computing systems, and the continuing networking and communications revolution have rapidly expanded the ability to produce, process, and provide access to digital information.

A key component of the National Agricultural Library's strategic planning included an examination of the issues associated with NAL's ability to

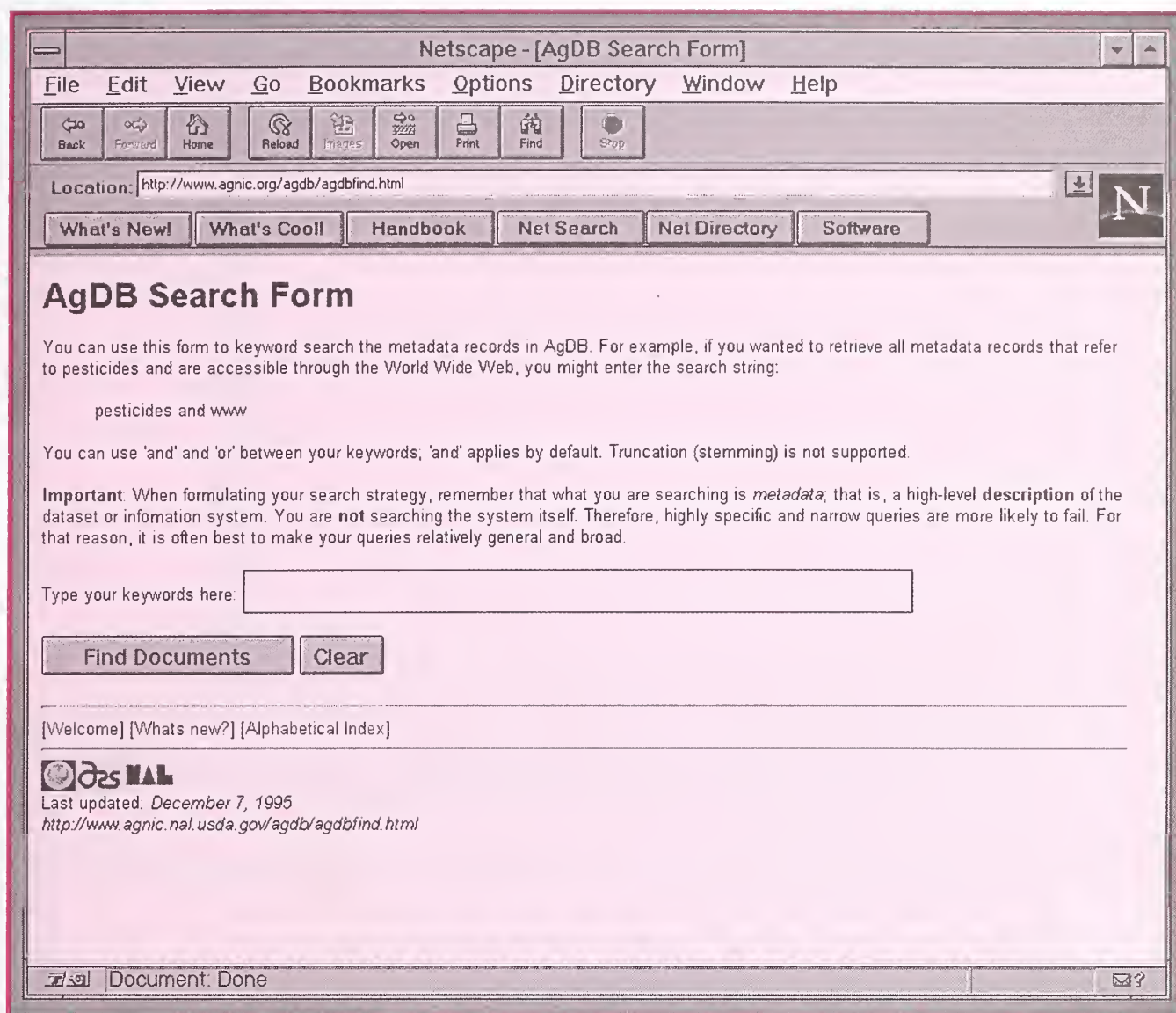


Figure 5: The AgDB Search Form in AgNIC

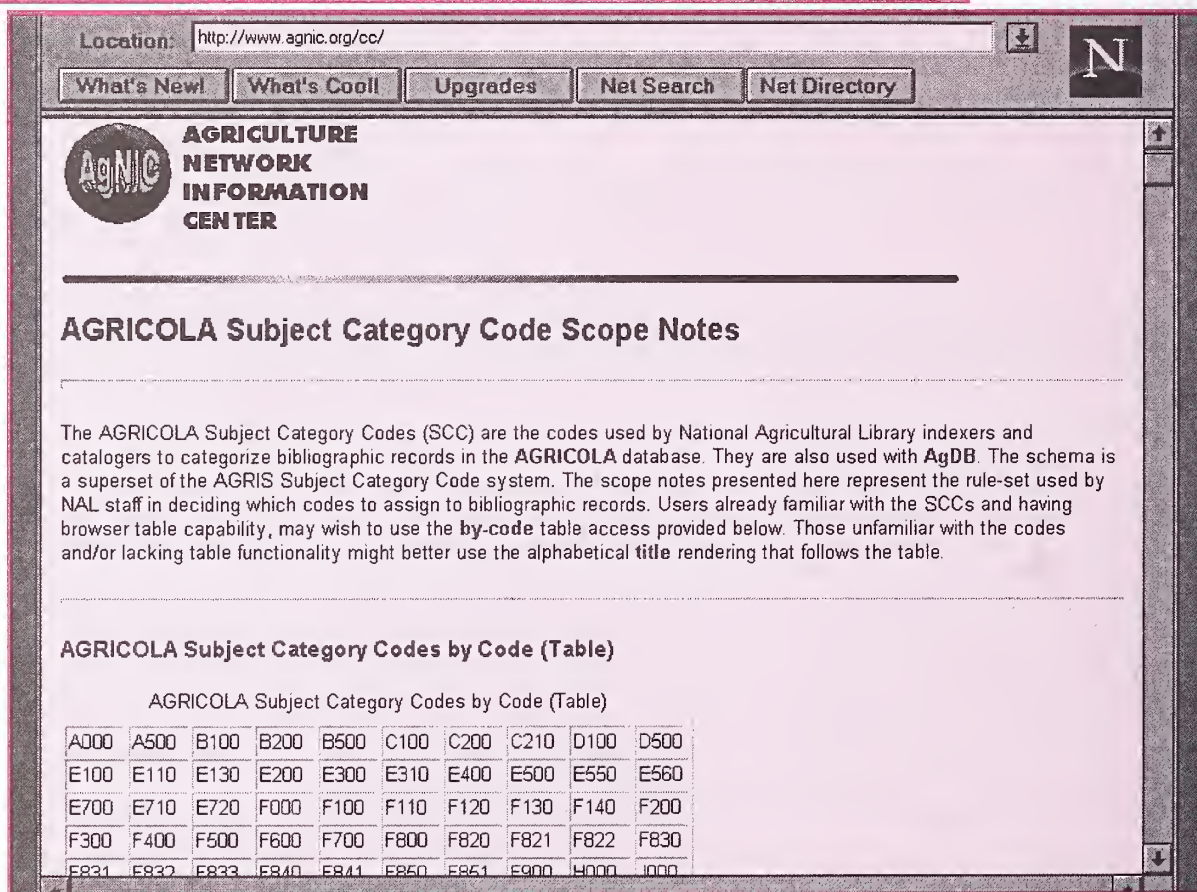
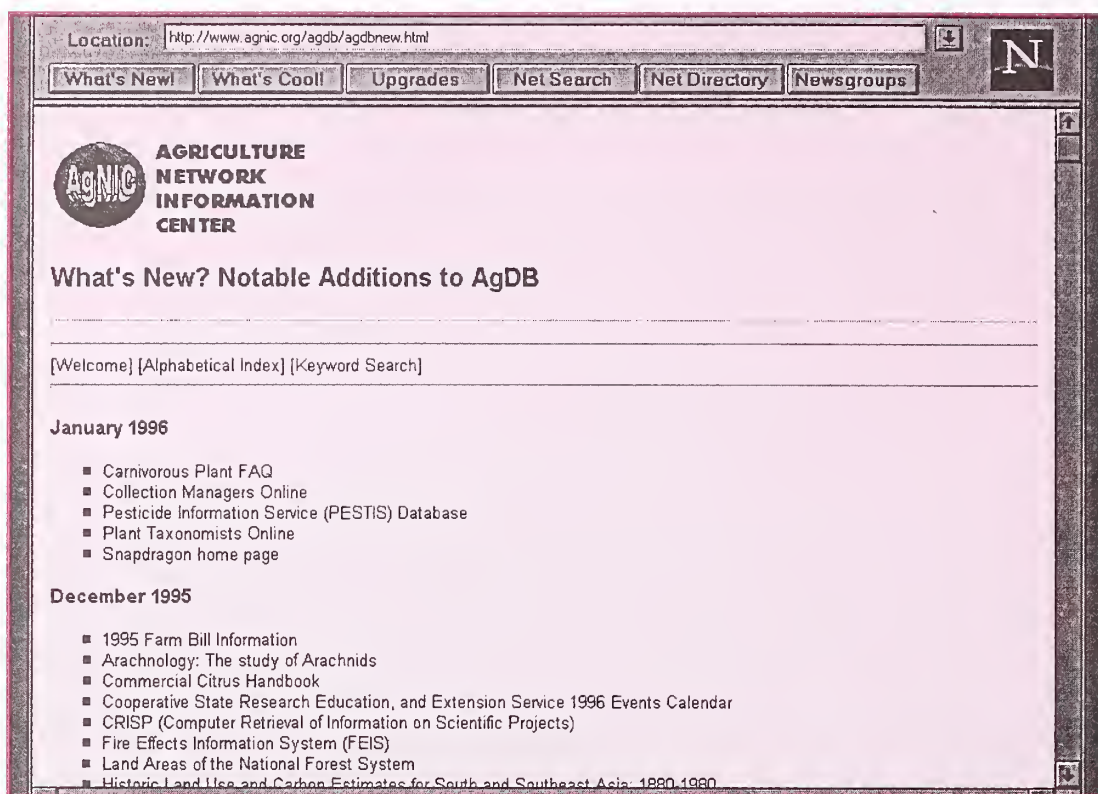
manage and store agriculture-related electronic information. NAL has long recognized that collaboration and resource sharing among institutions with a common interest in agriculture is essential, since no one institution has the resources required to meet user needs. Part of the planning process included a cooperative agreement between NAL and Iowa State University (ISU), under which ISU conducted an evaluation study and proposed a model for an information system which could meet the need for NAL participation with other institutions to facilitate access-to and dissemination-of information related to agriculture.

The end-product of the study was a recommendation to establish a distributed Agricultural Network Information Center (AgNIC) to provide worldwide seamless access to agricultural information in electronic form, agricultural subject area experts, and other resources via the Internet and its successor networks, in a manner in which the physical location of these resources would be transparent and immaterial to users. AgNIC is envisioned to include cooperation among equal partners (independent organizations bound by a common interest), with each participant retaining its own identity and autonomy, and all areas of

cooperation are voluntary. AgNIC will help users cope with the rapid growth in resource sites and the vast quantity of resources available over the Internet. It is intended to complement rather than duplicate existing systems. Although the focus of AgNIC is on agriculture-related resources, the concept could be applied equally as well to any other subject area.

The Agricultural Network Information Center (AgNIC) is designed to build upon the experiences gained from the InterNIC (Internet Network Information Center), which was established in April 1993 as a collaborative





(Top) Figure 6: The first screen of the "What's New?" page in AgNIC. (Bottom) Figure 7: The initial screen of the pages related to the AGRICOLA Subject Category Codes.



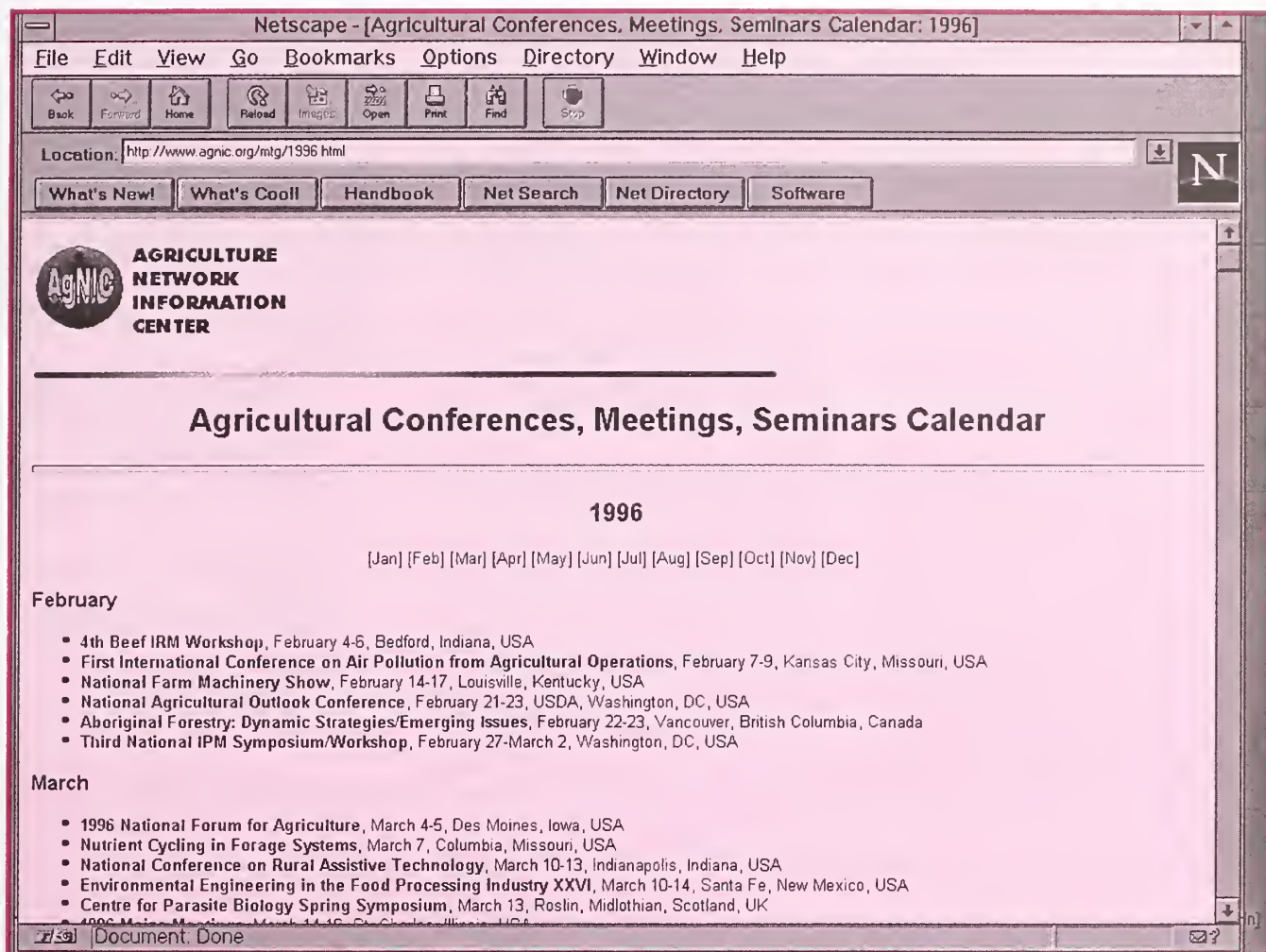


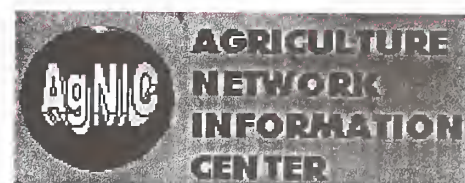
Figure 8: First screen of the Agricultural Calendar in AgNIC.

effort of three network service providers under a cooperative agreement with the National Science Foundation. However, whereas InterNIC provides discipline-independent technical services support in locating and using Internet information resources, AgNIC represents a framework for linking "discipline-specific" or subject-oriented resources of agricultural information service providers to improve access and dissemination while minimizing duplication. In addition, drawing on the experiences of the InterNIC, the primary focus of AgNIC, at least in the initial stages of implementation, will be toward providing other NIC's rather than trying to provide comprehensive services to the general public.

The AgNIC mission is to facilitate

and advance electronic access to people, agricultural information, and other resources for use by the public (academia, researchers, experiment stations, extension service, and other government users) and private (producers, agribusiness, suppliers and customers) components of agriculture, as well as private citizens.

In conclusion, the AgNIC prototype will test the concept of a distributed discipline-oriented NIC. This leveraging of the network will also provide solid opportunities to share resources and coordinate with similar programs. It is envisioned that AgNIC will prove to be a viable concept that will facilitate the growth of similar discipline-oriented NICs and contribute to the continuing evolution of networking.



*Editor's Note:*

*This article consists of excerpts from the full "Concept" paper available on the WWW at URL:*

<http://www.agnic.org/agnic/agnic.html>

—J. Swab, Editor

## ISIS on the Internet

The Online Public Access Catalog (OPAC) of the National Agricultural Library's ISIS (Integrated System for Information Services), is now available over the Internet at telnet address:

**opac.nal.usda.gov**

The catalog can be searched Monday through Saturday from 6 a.m. to 9 p.m., Eastern Time.

According to NAL Director Pamela André, while this improvement will help all users of the library, it will be of particular interest to those who are outside the Washington, DC, area. "ISIS contains two agricultural databases, the NAL Online Catalog and the Journal Article Citation database," André said. "To have Internet access to these resources will help to meet a critical need for agricultural information worldwide. Over the years NAL has become an internationally recognized resource for the agricultural community, serving thousands of scientists, researchers, and scholars throughout the

world. This is the beauty of electronic information. It allows a researcher on one side of the world to gain access quickly to new knowledge uncovered by a scientist on the other side."

The NAL Online Catalog is updated daily by NAL and contains the most current bibliographic citations for periodicals, books, reports, maps, audiovisuals, CD-ROMs and other electronic media, and other materials being added to the NAL collection. It also includes citations for materials at NAL's D.C. Reference Center and the U.S. National Arboretum Library in Washington, DC, and five Regional Research Center Libraries of the Agricultural Research Service (ARS) of the U.S. Department of Agriculture.

Daily NAL also updates the Journal Article Citation database, which consists of citations of journal and periodical articles, book chapters, reprints, and other specialized materials indexed by NAL and its cooperators.

This database is part of NAL's bibliographic database, AGRICOLA (*AGRICultural OnLine Access*), and AGRICOLA citations from January 1989 to the present are available. AGRICOLA contains over 3 million citations of agricultural and related literature.

For additional information contact John Stetka at:

*Telephone: (301) 504-6813*

*TDD/TTY: (301) 504-6856*

*FAX: (301) 504-7473*

*Internet/E-mail: jstetka@nal.usda.gov*

Or write to:

*John Stetka*

*Information Systems Division,  
Room 013*

*National Agricultural Library  
USDA, ARS*

*10301 Baltimore Avenue  
Beltsville, MD 20705-2351*

## Agriculture Calendar on AgNIC

Reference: AgNIC WWW Home Page; URL:  
**<http://www.agnic.org>**

An Agricultural Conferences, Meetings, and Seminars Calendar has been added as a component of AgNIC (Figure 8, on page 13) to provide a central repository for information and links to information concerning upcoming agricultural conferences, with emphasis on those of scientific significance. The calendar will strive to include all major national and international agricultural meetings and will incorporate local level meetings only when they seem to be scientifically significant. Meetings outside our purview will be left to appropriate local, regional, or organization-specific calendars.

Please take a look at it and furnish any comments you may have to:

**agnic@agnic.org**

Your input of other conferences that should also be included in the calendar is encouraged and welcome.

Instructions on how conferences may be included are given on the AgNIC Home Page.

— Richard Thompson

## Using ISIS OPAC via the Internet

The announcement above of the availability of the ISIS Online Public Access Catalog (OPAC) via the Internet was accompanied with information for users; that information is included here (with a few redundancies) for the convenience of readers. Users may go directly to OPAC via telnet or may access ISIS from the NAL home page in the World Wide Web. The telnet address is:

**opac.nal.usda.gov**

At the login prompt enter:

**ISIS**

Hours of access are from 6:00 a.m. to 9:00 p.m. Eastern Time, Monday through Saturday.

### About ISIS

Within ISIS, two databases are available to researchers for information retrieval. These databases are the NAL Online Catalog and the Journal Article Citation database.

The NAL Online Catalog is updated daily and contains bibliographic citations for books, reports, maps, journals/periodicals, audiovisuals, CD-ROMs and other electronic media, and other materials added to the NAL collection. It also serves as an agricultural union catalog that includes citations for materials at the U.S. National Arboretum Library and the five USDA, Agricultural Research Service (ARS) Regional Research Center Libraries. The NAL Online Catalog is the default database when



accessing ISIS. It is the most current source of AGRICOLA cataloging records. For materials published prior to 1966, consult the *Dictionary Catalog of the National Agricultural Library* if not found in ISIS.

The **Journal Article Citation** database is also updated daily and consists of citations reflecting journal/periodical articles, book chapters, reprints, and other specialized materials indexed by NAL and its cooperators. This database is a subset of the AGRICOLA database in that AGRICOLA indexing citations from January 1989 to the present are available. The Journal Article Citation database is the most current source of AGRICOLA indexing records.

ISIS can be searched Monday through Saturday from 6:00 a.m. to 9:00 p.m. Eastern Time. To access ISIS, telnet to:

opac.nal.usda.gov

Enter:

ISIS

at the OPAC login prompt.

To search the Journal Article Citation database, enter the command:

/IND

To return to the NAL Online Catalog from the Journal Article Citation database, enter the command:

/BIB

### Searching Tips

- Always press **(RETURN)** or **(ENTER)** after typing a command.
- Use the **(BACKSPACE)** or back-arrow key to backspace and correct errors.
- Use either upper or lower case letters.
- Omit punctuation.
- Correct spacing is important.
- Do NOT space before or after the slash (/) in commands.

### Search Commands

#### Author Search

A/Author's name (Type last name first)

Examples:

A/Duke James A

A/American Horticultural Society

A/Soil Microcommunities Conference

a/osullivan c m

#### Title Search

T/Title (Omit articles such as "a," "an," "the," "le," etc., if it is the first word in the title.)

Examples:

T/Designing with perennials

T/JOURNAL OF ANIMAL SCIENCE

t/j appl nutr

T/cheval de selle francais

#### Subject Heading Search

S/Subject term (Use Library of Congress Subject Headings (LCSH) in the NAL Online Catalog and CAB Thesaurus terms in the Journal Article Citation database.)

Examples:

S/CORN (LCSH used in NAL Online Catalog)

S/maize (CAB Thesaurus terms used in Journal Article Citation database)

s/zea mays (CAB Thesaurus terms used in Journal Article Citation database)

#### Call Number Search

C/Call number (Call numbers beginning with "IPM" or "IPS" indicate that the item has not been processed for the NAL collection and may still be on order from a vendor.)

Examples:

C/60.18 J82 (Retrieves a labeled card screen display)

H/s494.5 w3a3 (Retrieves a journal issue holdings screen)

M/QK99 A1F4 1990 (Retrieves a MARC formatted display)

#### Number Search

3/ISBN, ISSN, LCCN, or OCLC number (Retrieves a labeled card screen display)

Examples:

3/0899340466 (ISBN - International Standard Book Number)

3/0038-6723 (ISSN - International Standard Serial Number)

#### Keyword Search

W/one word

Examples:

W/KENAF (To find all occurrences of the word "kenaf")

W/A:Dean (To find all occurrences of the word "Dean" in the author index)

w/T:rice (To find all occurrences of

the word "rice" in the title index)

w/S:Herbs (To find all occurrences of the word "herbs" in the subject index)

#### Multiple Keyword Search

W/word1 word2 word3...word15 (Up to 15 words separated by spaces; words are automatically ANDed together; searching can be qualified by adding A:, S: or T: to any word)

Examples:

W/agriculture technology transfer Africa

w/t:proceedings a:nutrition a:conference a:feed a:manufacturers

#### Boolean Keyword Search

B/two words connected by AND, OR, or NOT

Examples:

B/dogs AND cats (Using AND restricts a search. This search will locate only those records that contain both "dogs" and "cats.")

b/Dogs OR Cats (Using OR widens a search. This search retrieves any record that has either "dogs" or "cats.")

B/dogs NOT cats (Using NOT limits a search. This search will find records containing "dogs" but excludes those with "cats.")

#### Keyword Browse

L/one word (Retrieves a browsable list of words and their occurrences in author, subject, title and all fields)

Examples:

L/peanut

L/SUGAR

#### CODEN Search

Z/CODEN

Example:

Z/CBPAB5

#### Tracing Search

TR (This command enables a search for authors, titles, subjects, and call numbers found on a labeled card display without re-entering a search term or phrase. Enter the command TR and once the entries have been numbered, enter the number of the entry which you would like searched.)

#### Limiting Searches

/SETLIMIT (This command invokes a menu listing criteria to limit



your search. Searches can be limited by format, publication date, and language.)

### Navigational Commands

**BA** Retrieves last displayed page of the previous type of screen

**NEXT** Displays the next citation when multiple citations have been retrieved

**PREV** Same as NEXT, but retrieves the previous citation

**NS** Displays the next screen; enter only when prompted to do so

**PS** Displays the previous screen

**NS #** Move forward 1 to 99 screens (e.g., NS 10 moves ten screens forward)

**PS #** Same as NS #, but moves back 1 to 99 screens

**/AM** Returns to the last author search screen viewed

**/CM** Returns to the last call number search screen viewed

**/KW** Returns to the last keyword search screen viewed

**/SM** Returns to the last subject search screen viewed

**/TM** Returns to the last title search screen viewed

**/ZM** Returns to the last CODEN search screen viewed

### Other Commands

**C** Displays circulation information

**CA** Displays the labeled catalog card

**/CLEAR** Clears the screen and erases all previous searches

**H** Displays the issue holdings of journals and periodicals

**HELP** Retrieves a help screen for the type of search you are attempting to perform

**/HELP** Retrieves a general help screen

**?** Activates the menu-driven search system. The "?" must be re-entered prior to each new menu-driven search.

**/?** Lists and describes commands

**/QUIT** Exit from ISIS

## ALIN on the WWW

The National Agricultural Library has put a prototype of two issues of its newsletter, *Agricultural Libraries Information Notes (ALIN)* on the Internet World Wide Web at:

<http://www.nal.usda.gov/alin/>

Or from the NAL home page: <http://www.nal.usda.gov> select menu items: How to Access the Collection; Other NAL Information Products; etc. (The menu will be revised in the future.)

The first issues on the WWW are the April-June 1995 issue, Volume 21, Numbers 4-6, and the July-August 1995 issue, Volume 21, Numbers 7-8. Library staff are currently preparing issues published since then for the WWW. Future issues should be put on the web around the same time as publication of the hard copy.

NAL would like to have comments of readers regarding the WWW version or about the printed version. Send comments (or questions, etc.) to the ALIN Editor, Joseph N. Swab at Inter-

net/E-mail:  
[jswab@nal.usda.gov](mailto:jswab@nal.usda.gov)

### Characteristics of the ALIN prototype on the WWW

1. All articles, lists, graphics, and photos from the printed version are included. (Occasionally a photo may be in full color instead of black & white as in the printed version.)

2. The enhanced table of contents, listing articles by categories, links directly to articles. Within articles there are links to related articles and graphics. One needs only to click the mouse on listings or embedded text in color, to retrieve the item.

3. Thumbnails of photos and graphics come up quickly with the article and expand to full views when the mouse is clicked.

4. When using a text only browser, the reader will get a note if a photo or graphic was available in the printed version.

5. At the end of each article there is an "About this issue of ALIN" feature that provides information for readers

and enables them to respond to NAL and the newsletter editor. By clicking the mouse on the editor's name, the reader will get a response form to send an E-mail message to the editor at NAL.

### Questions for readers regarding the ALIN prototype on the WWW for which NAL would like feedback

1. How do you want to get ALIN electronically?

a. At the WWW site only?

b. An e-mail message that the new issue is up on the WWW?

c. Directly at an e-mail address? This would be an ASCII file without formatting and graphics. It would be a compressed file of text which could be retrieved as a unit as opposed to the web files which are many text and graphic files linked together.

d. Would you drop your free paper subscription, or would you still need a paper copy?

e. How long should an issue stay on the web? Do you need archival access?

2. Is there anything you would like to look differently in either the electronic or paper versions? What are your suggestions?

3. Do you have any suggestions about ALIN content? What isn't there that you would like to see in *ALIN*? Is there anything that you would like expanded or presented in a different way? Are there any regular features that could/should be deleted or reduced in future issues?

—Joseph N. Swab, *ALIN* Editor

## Putting ALIN on the Internet

by Jim Comes

Science-Health Science Library, Ball State University, Muncie Indiana

In January 1996 the National Agricultural Library began to place on the Internet the *Agricultural and Libraries Information Notes (ALIN)*. The first issue available was the April-June 1995 issue, Vol. 21, Nos. 4-6. This was a prototype issue designed to look at the processes related to publishing information in electronic formats and distributing the information via the Internet. The project began with the conversion of the NAL Annual Reports for 1993 and 1994 for inclusion in NAL's World Wide Web pages. *ALIN* is accessible on NAL's WEB site, URL:

<http://www.nal.usda.gov/alin/>

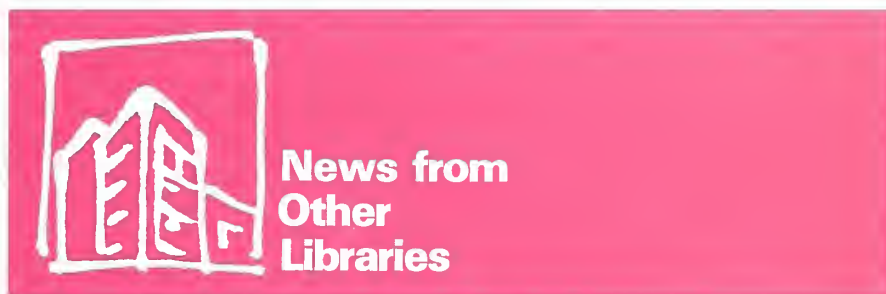
In March 1996 a second *ALIN* issue was put on the web, July-August 1995, Vol. 21, Nos. 7-8.

Recognizing the power of linking electronic files and the power of the Internet to distribute information, the editors saw that *ALIN* offered a good sampling of images and text to examine the operations involved in creating a hypertext document. The resources, equipment, policies, and processes were areas which needed to be addressed in this initial effort. The experience of placing two annual reports and two *ALIN* issues on NAL's WEB site provided the answers to many questions and concerns. Among them were how to organize files, link articles, scan images, import graphics, and use basic HTML tags. Although the first issue took extensive time to organize and markup, it is expected that future issues will be available in less time.

Several decisions were made to enhance the printed version of *ALIN* to assist anyone reading an *ALIN* issue on the Internet. An expanded table of contents was included to permit users to jump to specific articles. At the end of each article, the the editors placed a link to a publication statement about *ALIN*, with a response form for the reader to communicate back to NAL and a link to the Table of Contents.

The equipment used was a 486 PC and a HP Scan Jet IIcx scanner. The

software included Word Perfect 6.1 editor for HTML, Hot Dog—a HTML editor, Adobe Photoshop and Paint Shop Pro. HTML 1.0 or HTML 2.0 tags were used to insure interpretation and readability by most browsers. It was discovered early in the process that Mosaic and Netscape offered different views of the same information, especially when text was aligned with an image. Thumbnail images were used more often to enable a person reading *ALIN* to upload a document more quickly.



## USDA Statistics on the WWW via Cornell's Mann Library

Back in the old days—two years ago—Cornell University agriculture students surfed the USDA Economics and Statistics System gopher site at the university's Albert R. Mann Library for the latest in crop and farm statistics. Well, that was then.

Now, the USDA site has jumped onto the World Wide Web. As of early March, it can be found at:  
<http://usda.mannlib.cornell.edu/usda>

To help students, faculty, growers, and farmers to prosper, Mann Library began providing access to USDA statistical data from the Economic Research Service (ERS) and the National Agricultural Statistical Service (NASS) in 1993. These files included crop, livestock, and agricultural economic statistics from the United States and other countries. Last year, the system was expanded to include reports from the ERS, NASS, and the World Agricultural Outlook Board (WAOB). These

included weekly, monthly, and quarterly forecasts and estimates on crop production, dairy outlooks, wheat forecasts, and many other agricultural subjects.

Recently the World-Wide Web and simple-to-use graphical browsers have revolutionized Internet use. "In the early 1990s, when the library was creating the system, gopher technology was the leading Internet access method," said Oya Rieger, Public Services Librarian. "During the last two years, the World-Wide Web became the preferred Internet protocol. Our system upgrade enables the library to improve the user interface substantially, making it much easier to locate and use related information."

Beginning in October 1995, a group headed by Rieger performed the technical upgrades necessary to migrate the ERS, NASS, and WAOB data and reports into the World-Wide Web environment. Although this new, improved delivery mechanism is now available, the gopher remains to continue service for users for whom Web access is difficult because of hardware or software constraints.

Much of this Web upgrade project



was funded by the USDA's Cooperative State Research, Education, and Extension Service. Since January 1994, the system has hosted more than 150,000 users—an average of more than 200 accesses per day—with user support provided by Mann and USDA staff.

Mann Library now maintains Web, gopher, telnet and FTP access to data from the USDA. For gopher access, connect to:

**usda.mannlib.cornell.edu**

For telnet access, connect to:  
**usda.mannlib.cornell.edu**  
and log in as:

**usda**

No password is needed for telnet access.

To use the anonymous FTP protocol, connect to:

**usda.mannlib.cornell.edu**  
and log in as:

**anonymous**

Then, change the directory with:  
**cd usda**

For questions about accessing this information through the Internet, contact the Mann Library Reference Desk at (607) 255-5406, or send e-mail to:  
**help@usda.mannlib.cornell.edu**

Albert R. Mann Library supports the instruction, research, and extension programs of Cornell University's College of Agriculture and Life Sciences, College of Human Ecology, Division of Biological Sciences, and Division of Nutritional Sciences. A land-grant library for New York, Mann is open to the general public. Mann is one of the Cornell University Library system's 19 unit libraries.

—Mann Library

## FAO Sabbatical Program

The National Agricultural Library and the Food and Agriculture Organization of the United Nations (FAO) have had a continuous program of mutual support and cooperation. The following information received from JoAnne De La Riva of the Washington, DC, office of FAO, [J.DE-LA-RIVA-FAO@CGNET.COM], regarding the FAO Sabbatical Program is published for interested *ALIN* readers and their colleagues.

FAO has an immediate need for someone with experience in INTERNET to work on dissemination of documents and information on next November's World Food Summit. However, other opportunities will also arise during the year.

Cooperation between FAO and academic and research institutions is embodied in FAO's new initiative, formally called "Programme of Cooperation with Academic and Research Institutions." Information on the program follows. Those interested in being considered for the sabbatical program should forward a *curriculum vitae*, along with a statement of areas of interest and availability dates to Mr. Charles H. Riemenschneider, Director, FAO Liaison Office for North

America, whose contact address appears at the end of this article.

**Background.** This program is one of several partnership initiatives launched by FAO Director-General Jacques Diouf to increase the effectiveness and impact of FAO's programs. The "Sabbatical" program provides for the engagement of research and academic personnel from world centers of international recognition to work alongside FAO staff in program activities of the Organization for mutual benefit. The visiting researchers thus have opportunities to be actively involved in international cooperation. They interact with a community of professionals from the member countries of the Organization, many working in their own specific fields of specialization or related areas. FAO staff and programs will also benefit from this association as it will bring the experience and expertise of the researchers and scientists to bear on FAO's work, contributing to the Organization's role as a center of excellence.

**The Program.** The sabbatic scheme seeks to promote collaboration in the fields of agriculture, forestry, and fish-

eries. FAO will, from time to time, inform governments or designated coordinating institutions of its priority program areas and the specific subject matters on which the Organization wishes to collaborate with academic and research institutions. FAO and the sponsoring institution will discuss and agree upon the details of the task to be performed or the study or research to be undertaken by the scientist/researcher.

**Conditions.** The following conditions govern the services of the researchers:

a. The sponsoring institution must formally inform FAO, in writing, of its readiness to collaborate in the program;

b. The sponsoring institution meets salary expenses, together with social security benefits including medical and accidental insurance, and maintains any and all entitlements the loaned scientist would normally expect, for the duration of the assignment;

c. Although medical coverage is provided by the sponsoring institution, the visiting scientist will be covered for service-incurred accident, injury, and death under the FAO Compensation Plan;

d. The duration of any one assignment will not exceed one year;

e. The visiting scientist will not have the status of an FAO staff member during the period of assignment, but he or she will be entitled to the facilities necessary for efficient discharge of functions;

f. FAO will meet operating expenses, covering approved duty travel and a subsistence allowance of US\$2,500 per month.

Mr. Riemenschneider will be pleased to respond to specific questions.

*Charles H. Riemenschneider, Director  
Liaison Office for North America  
Food and Agriculture Organization  
of the United Nations  
1001-22nd Street, NW, Suite 300  
Washington, DC 20437*

*Tel: (202) 653-2400;*

*Fax (202) 653-5760;*

*E-mail:*

*C.Riemenschneider-  
FAO@CGNet.Com*





photo: J. Swab

Yara M. Chagas de Carvalho

## Carvalho Was Visiting Scholar

Dr. Yara M. Chagas de Carvalho, of Sao Paulo, Brazil, was a visiting scholar at the National Agricultural Library from November 21, 1995, through January 31, 1996. An economist, Dr. Carvalho is a researcher at an Agricultural and Economical Research Institution (Instituto de Economia Agrícola) under the Sao Paulo State Department of Agriculture (Secretaria de Agricultura e Abastecimento do Estado de Sao Paulo). Her visit to the United States began May, 1995, in connection with a multi-institutional group organized within the USDA. Members of the group work with communities to help them promote their community's development.

"Yara," as she prefers to be called, is writing a manual for project development and management to promote rural development, primarily analyzing and designing policy proposals concerned with sustainable rural development. In this respect, Yara is specifically interested during her visit in participatory research and development, sustainable ground water irrigation, and conflict resolution. In connection with these interests, NAL staff from those information centers that focus on water quality, rural information, and

alternative farming systems, were able to be of particular assistance.

Although the institution that Yara works for is primarily concerned with trade of agriculture and agribusiness products, Yara took the opportunity to practice her newly-learned searching skills to search AGRICOLA for information about flowers and tropical and temperate fruits. NAL staff were also able "to open Yara's eyes" to the "undiscovered world of the Internet," and to introduce her to WordPerfect 6.1.

The Alternative Farming Systems Information Center, through which Yara's visit was arranged, reports that Yara asked to extend her stay at NAL,

finding it "so pleasant and fruitful" that the time had not been enough for an "experience that went beyond any expected possibility." NAL Director Pamela André was pleased to grant Dr. Carvalho's request, and joins other NAL staff in wishing her continued success in her research and work in Sao Paulo.

Persons wishing to communicate directly with Dr. Carvalho are invited to contact her through email: [ieacet@eu.ansp.br](mailto:ieacet@eu.ansp.br) or via fax (5511) 276-4062. Yara returned to Brazil at the end of February.

— Jane Gates



**News  
Notes**

## NAL/New Zealand Share Animal Welfare Information

The National Agricultural Library has entered into an agreement with the Government of New Zealand to exchange animal welfare information. In a Memorandum of Understanding (MOU) signed by NAL Director Pamela André and the Chief Veterinary Officer of the New Zealand Ministry of Agriculture and Fisheries (MAF), the two organizations "agree to cooperate in a program for the exchange of animal welfare information resources."

"For years, NAL has informally shared animal welfare information with New Zealand, and many other countries," André said. "This agreement formalizes our dealings with New Zealand. The goal is to foster the humane treatment of animals used in research, teaching, agriculture, recreation, and exhibition."

To accomplish this the MOU states that NAL and MAF will share animal welfare information; jointly produce materials of interest to both countries; and commit to educate farmers, ran-

chers, and those who use animals in research and teaching about animal welfare concerns and responsibilities.

Coordinating this effort for NAL is the library's Animal Welfare Information Center (AWIC), a staff of animal welfare specialists available to provide reference and referral services and database searches to those using animals in research, education and testing, and animals on exhibit.

"The issue of animal welfare is a sensitive one in many countries," said André. "NAL was mandated by Congress in the 1985 amendments to the Animal Welfare Act to establish the Animal Welfare Information Center to provide information that helps to ensure that animals used in research, agriculture, and recreation are treated humanely. This memorandum of understanding with New Zealand is another step in meeting this responsibility."

According to AWIC Coordinator Jean Larson, AWIC has similar agreements with organizations in the United

Kingdom and Australia.

"We are always interested in collaborating with other countries to produce and disseminate information on animal welfare issues," Larson said. "Ultimately, such collaborations will improve the treatment of animals worldwide."

For additional information contact Jean Larson or the Animal Welfare Information Center at:

Telephone: (301) 504-6212  
TDD/TTY: (301) 504-6856  
FAX: (301) 504-7125  
Internet: [awic@nalusda.gov](mailto:awic@nalusda.gov)

Or write to:

Animal Welfare Information Center,  
5th Floor  
National Agricultural Library  
USDA, ARS  
10301 Baltimore Avenue



## New Publications of Note

## Environmental Enrichment Guide for Laboratory Animals

A new reference guide on laboratory animal welfare has been produced by the the Animal Welfare Information Center (AWIC) of the National Agricultural Library and the Universities Federation for Animal Welfare (UFAW) of the United Kingdom and is available to the public. *Environmental Enrichment Information Resources for Laboratory Animals 1965-1995* is a 294-page resource guide covering birds, cats, dogs, farm animals, ferrets, rabbits, and rodents, produced in an effort to encourage the implementation of environmental enrichment programs in laboratory animal husbandry. It was produced under Individual Memorandum of Understanding No. 58-0520-3M-F105, and is *AWIC Resources Series No. 2*.

Each section of the bibliography is introduced by a paper which provides background information on the biology of the animals and their currently accepted needs in captivity. *Environmental Enrichment...* also contains a list of journals that appear in the bibliography, subscription information for those publications that routinely publish articles on enrichment, a worldwide list of laboratory animal organizations, contact information for 27 com-

mercial suppliers of enrichment objects, lists of toys and other objects that are commonly used with the species covered, and a keyword index. Non-human primates were excluded since they are the subject of an earlier publication.

In North America, South America, Caribbean, Central America, and Mexico, copies of this publication are available from:

Animal Welfare Information Center  
National Agricultural Library  
10301 Baltimore Avenue  
Beltsville, Maryland 20705-2351  
USA  
Telephone (301) 504-6212  
TDD/TTY: (301) 504-6856  
FAX: (301) 504-7125  
Internet/E-mail: [awic@nal.usda.gov](mailto:awic@nal.usda.gov)  
Price: Free

In the United Kingdom, Europe, Africa, Asia, Australia, and other countries, copies of this publication are available from either of the following two sources:

Universities Federation for Animal  
Welfare (UFAW)  
8 Hamilton Close  
South Mimms  
Potters Bar, Hertfordshire EN6 3QD  
United Kingdom

## Environmental Enrichment Information Resources for Laboratory Animals

1965-1995

Birds, Cats, Dogs,  
Farm Animals,  
Ferrets, Rabbits, and  
Rodents



Telephone 01707 658202  
FAX: 01707 649279

E-mail: [ujhtpo@ucl.ac.uk](mailto:ujhtpo@ucl.ac.uk)

Price: UK and Europe £7

including postage.

Elsewhere £4.50 plus postage.

Make cheques payable to UFAW

or

Australian and New Zealand  
Council for the Care of Animals in  
Research and Teaching  
(ANZCCART)

PO Box 19

Glen Osmond, SA 5064  
Australia

Telephone 61 8 303 7393

FAX: 61 8 303 7113

Price: Please inquire

AWIC is one of 10 specialized information centers established by NAL to keep abreast of current information on issues of particular importance to U.S. agriculture. NAL is part of the Agricultural Research Service of the U.S. Department of Agriculture. It is the largest agricultural library in the world and one of four national libraries of the United States, with the Library of Congress, the National Library of Medicine, and the National Library of Education.

UFAW is a science-based animal welfare charity (in the United Kingdom, registered charity number 207996) which has helped improve the lives of numerous farm, laboratory, zoo, wild, and pet animals since 1926. UFAW gives research grants and stu-



dent scholarships; provides advice and publishes books, videos, and leaflets on animal care; publishes the journal *Animal Welfare*; gives awards for high animal welfare standards; and organizes meetings and conferences. All aspects of UFAW's work contribute towards improving the conditions under which animals are kept. UFAW is an independent charity and does not receive income from universities, government, or commerce. For additional information, contact Victoria Taylor, BSc, Development Officer, at the address for UFAW above.

—Tim Allen

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## Sustainable Agriculture Reference Guide Available

A new reference guide on sustainable agriculture has been published by the National Agricultural Library and is available to the public. *Sustainable Agriculture in Print: Current Periodicals* was produced by NAL's Alternative Farming Systems Information Center (AFSIC) and is intended "to serve as a guide to the current periodical literature on agricultural sustainability issues, developments, and practices."

The publication defines sustainable agriculture as "a system that assumes a long-term outlook in terms of agricultural productivity, with broad consideration and appraisal of the environmental and social values associated with food and fiber production and distribution." Two-hundred and ninety-nine periodicals are listed.

Copies of this publication in hard copy and in electronic format are available from:

*Alternative Farming Systems  
Information Center  
National Agricultural Library  
4th Floor  
USDA, ARS  
10301 Baltimore Avenue  
Beltsville, Maryland 20705-2351  
Telephone: (301) 504-5724  
TDD/TTY: (301) 504-6856  
FAX: (301) 504-6409  
Internet/E-mail: [afsic@nalusda.gov](mailto:afsic@nalusda.gov)*

## Second Food Irradiation CD-ROM Available

A second CD-ROM on food irradiation is now available from the National Agricultural Library. The disc, *Food Irradiation 2*, contains 11,000 pages of government research conducted in the 1950s and 60s on the "wholesomeness of irradiated foods." Information on the disc is in the form of searchable bibliographic records plus actual page images from reports and articles.

The disc was produced as part of the National Agricultural Text Digitizing Program (NATDP) with assistance from NAL's Food and Nutrition Information Center (FNIC). Another disc, *Food Irradiation 1*, was produced by NAL in 1993. NAL produced both discs in response to growing international need for access to food irradiation research materials.

"Food irradiation is approved and used in 38 countries and endorsed by the Food and Agricultural Organization and the World Health Organization of the United Nations," said FNIC Coordinator Sandy Facinoli. "Prior to the food irradiation discs, some of the research material was available only in paper form at NAL. These two discs make the material more accessible and assist scientists in studying the research and literature on the subject."

The research materials on the latest disc include progress, pathology, and clinical reports, raw data and journal articles. Most of the materials are from research conducted by the Department of the Army.

According to Facinoli, at the time the research was being conducted, a General Accounting Office study put the value of the research at \$80 million.

Facinoli said FNIC worked closely with Dr. Ari Brynjolfsson, the former director of the International Facility for Food Irradiation Technology in The Netherlands, in evaluating and organizing materials for the new disc.

Copies of *Food Irradiation 2* are available by contacting:

*Food & Nutrition Information Center  
National Agricultural Library  
Room 304  
USDA, ARS  
10301 Baltimore Avenue  
Beltsville, Maryland 20705-2351  
Telephone: (301) 504-5619  
TDD/TTY: (301) 504-6856  
Fax: (301) 504-6409  
Internet/E-mail: [fnic@nalusda.gov](mailto:fnic@nalusda.gov)*

Through the National Agricultural Text Digitizing Program, NAL produces CD-ROMs containing sections of the NAL collection related to specific agricultural subjects. NAL distributes the discs to land-grant university libraries and other organizations. Other NATDP discs include *Nicoll's Birds of Egypt*, *Agronomy Journal*, *Aquaculture II*, and *George Washington Carver*.

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## NAL Helps Egyptians Produce New CD-ROM

A training program the National Agricultural Library conducted to teach Egyptian librarians about CD-ROM (compact disc-read only memory) technology has resulted in the latest NAL CD-ROM, *Nicoll's Birds of Egypt*.

The disc, produced jointly by NAL and the Egyptian National Agricultural Library (ENAL), was funded through a grant from the U.S. Agency for International Development to the U.S. Department of Agriculture.

"NAL has been working with the Government of Egypt for the last several years to establish the Egyptian National Agricultural Library," said NAL Director Pamela André. "Since 1990, NAL has been providing Egyptian librarians with training and guidance in all aspects of building and running a world-class agricultural library. And since CD-ROM is becoming an important medium for the dissemination of information, NAL provided training in that too."

The CD-ROM is an electronic version of *Nicoll's Birds of Egypt*, a two-volume, 700-page work by Colonel R.

Meinertzhagen, published in 1930 under the authority of the Egyptian Government. The volumes contain taxonomic descriptions, keys to many of the genera and species, and geographic and ecological information about Egypt's birds. The books are based on work conducted in the early 1900's by Michael Nicoll, who identified and described most of these birds. Over 40 full-color plates are included, as well as black and white drawings and comparative tables. The volumes are part of NAL's Special Collections Unit rare books, and are a favorite of visitors.

The disc was produced from this work by Egyptian librarians Hend Fathalla and Magdy El-Sayed, who recently spent two months at NAL in Beltsville. Judi Zidar, NAL Coordinator of the National Agricultural Text Digitizing Program (NATDP), conducted the training and decided that a "hands-on" approach would be most beneficial.

"Hend and Magdy set to work from the first day selecting what they would scan, designing a database, and preparing the materials," Zidar said. "Assisted by NATDP staffers Terry Stephens and Tim DeGhelder, they performed the scanning and text recognition, added headers containing bibliographic and taxonomic information, and inserted image links into the text records." When the text was ready, they indexed it using *Windows Personal Librarian* authoring software, from Personal Library Software of Rockville, MD. They premastered the resulting database to a CD-R disc, which was later sent to a mastering facility for duplication.

"Ms. Fathalla and Mr. El-Sayed left NAL with boxes of notes and training materials, prepared to begin their own CD-ROM production program at ENAL. Their heroic effort to learn so much in so little time will pay huge dividends for the researchers, farmers, and consumers they serve at home," Zidar said.

Through the National Agricultural Text Digitizing Program, NAL has produced and distributed CD-ROM's on food irradiation, aquaculture, agronomy, Agent Orange, acid rain, the research of George Washington Carver, and food, agriculture, and science.

ENAL will distribute the *Nicoll's*

*Birds of Egypt* CD-ROM to users in Egypt, and NAL is sending copies to land-grant university libraries in the United States.

Copies are also available upon request by sending a self-addressed mailing label to:

Judith A. Zidar, NATDP Coordinator  
Information Systems Division

Room 013

National Agricultural Library  
USDA, ARS

10301 Baltimore Avenue

Beltsville, MD 20705-2351 USA

Telephone: (301) 504-5853

TDD/TTY: (301) 504-6856

FAX: (301) 504-7473

Internet/E-mail: [jjzidar@nalusda.gov](mailto:jjzidar@nalusda.gov)



**Staff  
Update**

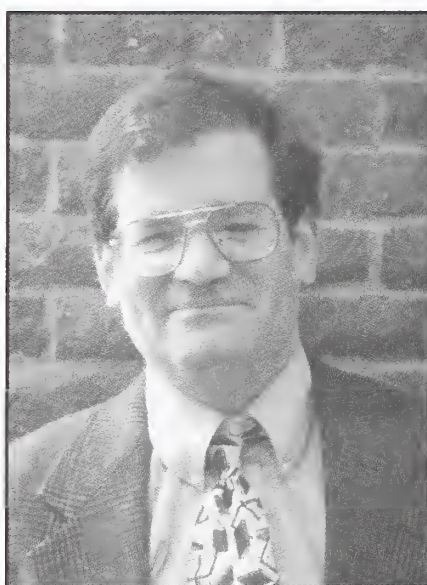


photo: J. Swab

**Michael Esman**

## Esman Heads Cataloging

In early December, Sally Sinn, Associate Director for Technical Services, announced that Michael Esman is the new Head of the National Agricultural Library's Cataloging Branch. Esman, who has been a Cataloger with NAL since January 1986, assumed his new duties on December 10, 1995. When he first joined the NAL Staff he cataloged serials in the Serials Branch.

Since July 1991 he has served as Head of the Special Materials Section of the Cataloging Branch, overseeing the cataloging of audiovisual materials.

In his new position Esman supervises cataloging of all types of materials, the inputting and production of cataloging records, and the preparation of materials for entry into the general and special collections of the library. He also has responsibility for cooperative cataloging with land-grant university libraries, USDA field libraries, and other institutions, and representing the library in various forums related to cataloging and processing issues.

Before coming to the National Agricultural Library, Esman was a cataloger from 1974-76 at Plymouth State College in Plymouth, New Hampshire, and from 1977-86 at George Washington University (GWU) in Washington, DC. He earned his B.A. in political science at Eisenhower College, Seneca Falls, New York, his M.L.S. (1974) at the State University of New York at Albany, and his M.A. in Russian and Eastern European Studies (1983) at GWU.

Esman is active in ALA, where he chaired the ALCTS Audio-Visual Committee, and was a member of the Preservation Microfilm Committee. He has also been active in the OnLine Audiovisual Catalogers (OLAC) group. Esman is married and enjoys sports in his leisure time.

—Joseph N. Swab





photo: J. Swab

**Mike Thompson**

## Mike Thompson Led WWW Effort

Michael E. "Mike" Thompson, co-author of the article on NAL's World Wide Web home page, is a librarian in the Document Delivery Services Branch. He has many duties, among them: Coordinator of the Regional Document Delivery System, AGLINET liaison, contracting officer's representative (COR) for NAL's Lending Services Contract, co-chairman of the Web Management Team (with Ray Dobert), and co-Webmaster (with Steve Rose). He assumed these roles in 1995 after serving as Head of Interlibrary Borrowing since 1989. Just as this issue was ready to be printed, it was announced that Mike will move to the Information Systems Division as a computer specialist administering several systems including Windows NT and Unix servers, and will continue managing NAL's World Wide Web pages.

Thompson joined the NAL staff in 1979 as a library technician in Cataloging where he cataloged Russian materials while still a student at the University of Maryland until 1981 when he received his B.A. in Russian Language and Literature. In 1983 he rejoined the NAL staff as a technician in Indexing where he input data and assisted with indexing Russian language materials. In 1984 Thompson became a technical information specialist in Reference, assuming responsibility for the Translations Program, through which materi-

als in Russian and other languages were translated into English in Pakistan and India using PL-480 funds. He moved with the Translations Program to DDSB and completed the program. Subsequently, Thompson became responsible for microforms collection management and services, and, thereafter, stack maintenance until moving to Interlibrary Borrowing in 1989.

Currently, Thompson is also a member of USDA's Web Managers Group, and served on USDA's Home Page Development and Maintenance Policy Committee.

Thompson is married and lives in Beltsville with his wife, Kathleen, a University of Maryland graduate working as a computer instructor for a private firm.

—Joseph N. Swab



photo: J. Swab

**Richard Thompson**

## Richard Thompson

The author of the AgNIC materials in this issue of *ALIN*, Richard Thompson is the Assistant to the Associate Director for Automation, in which position he has been since he joined the library staff in June 1991. His principal duties include long range planning in information technology, and serving as the AgNIC coordinator for NAL, providing liaison with the coordinators for other institutions participating in AgNIC. Thompson joined the NAL staff in 1992.

—Joseph N. Swab

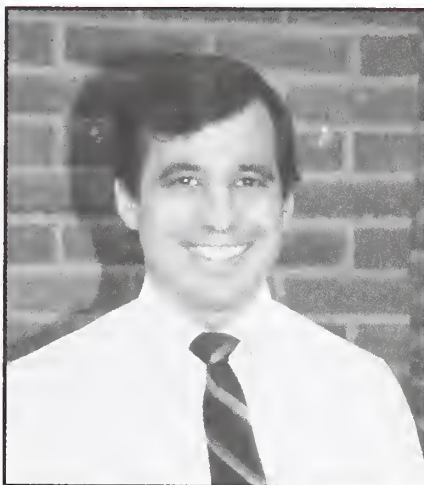


photo: J. Swab

**Steve Rose**

## Rose Is NAL's Network Coordinator

In September 1994, Steve Rose joined the National Agricultural Library staff as the Network Coordinator in the Library Automation Branch, Information Systems Division. The position includes responsibility for NAL's internal network backbone, LAN's, and Internet access, including the technical aspects of NAL's gopher and World Wide Web activity. He has served on several committees related

to development and management of NAL's home page and secondary pages on the WWW, and related to NAL's Electronic Information Initiative. He contributed information and advice to the authors of articles on these activities in this issue of *ALIN*.

Before coming to NAL, Rose had been an electronics engineer for ten years at the U.S. Naval Surface Warfare Center where he worked on combat systems for surface ships. He earned his Bachelor of Electrical Engineering at Catholic University in 1985, and M.S. in Electrical Engineering at George Washington University in 1989.

Steve and his wife, Lisa, have 3 sons.

—Joseph N. Swab



## New Bibliographies

The bibliographies in the *Quick Bibliography* series are primarily computerized online as batch bibliographies emanating from searches performed by the NAL Public Services Division Staff in response to customer requests. Searches are selected for inclusion based on the currency of the topic, interest among clientele, and probable value to a larger audience. Since October 1988, all *QB's* include search strategies. Unless otherwise specified, citations are from AGRICOLA.

The other bibliographic series, including *Special Reference Briefs*, have been researched and produced to meet special needs of clientele of the Library and its Information Centers. Revisions or updates will be announced when produced. Only one copy of a requested title will be sent; however, requesters may make copies. To request a copy of a *Quick Bibliography*, *Special Reference Brief*, or other bibliographic work, circle the desired title(s) below and send your request with a self-addressed label to:

Reference Branch, Room 100  
National Agricultural Library  
USDA, ARS  
10301 Baltimore Avenue  
Beltsville, MD 20705-2351

## Quick Bibliographies

**Q.B.—96-01.** Biotechnology: Risk Assessment/Biosafety, January 1992-September 1995. 138 citations in English. Prepared by Raymond Dobert. Biotechnology Information Center. January 1996. Updates Q.B. 94-42.

## Special Reference Briefs

**SRB—95-09.** Education Programs in Technology Transfer, A Directory of Degree Programs; Non-Degree/Certificate Programs; Proposed Courses.

Compiled by Mary Stevanus. Technology Transfer Information Center. December 1995. 40p.

## Miscellaneous

Consumer Resource List on Food Allergies and Intolerances. Compiled by Shirley King Evans. Food and Nutrition Information Center. November 1995. 4p.

Educational and Training Opportunities in Sustainable Agriculture. 8th Edition. Compiled by Jane Potter Gates and Volunteer Staff. Alternative Farming Systems Information Center. December 1995. 46p.

Herbal Medicine Resource List. Compiled by Shirley King Evans. Food and Nutrition Information Center. January 1996. 4p.

Professional Resources about Eating Disorders. Compiled by Shirley King Evans. Food and Nutrition Information Center. December 1995. 17p.

Resources about Eating Disorders for Consumers. Compiled by Shirley King Evans. Food and Nutrition Information Center. December 1995. 5p.



## New Serials Received at NAL

*AREI Updates.* Washington, DC: Natural Resources and Environment Division, Economic Research Service, U.S. Department of Agriculture. No. 1- 1995-  
**aHD1751.R73**

*The Acquisitions Librarian.* New York: Haworth Press. Two no. a year. No. 1- c1989-  
**Z689.A15A27**

*Agrarreport Schleswig-Holstein / Der Minister für Ernährung, Landwirtschaft, Forsten und Fischerei des Landes Schleswig-Holstein.* Kiel: Das Ministerium. Annual. 1994-  
**S232.S3**

*Agricultural Communicators in Education (U.S.) Member Directory.* Evinston, FL: Agricultural Communicators in Education. Annual. 1991-  
**S494.5.C6A37**

*Agricultural Statistics at a Glance.*

Dehli: Publ. by the Controller of Publications. May 1992-  
**S471.I4A36**

*Agroforestería en las Américas.* Turrialba, Costa Rica: CATIE. Quarterly. Año 1, no. 1 (enero-marzo 1994)-  
**S494.5.A45A347**

*American Belgian Blue Journal.* Sulphur Springs, TX: American Belgian Blue Association. Quarterly. Vol. 1, no. 1 (Winter 1994)-  
**SF199.B44A44**

*Annual lac bulletin = Varshika laha prativedana.* Ranchi, Bihar: Govt. of India, Ministry of Agriculture. Directorate of Lac Development. Annual. 1982-83-  
**HD9769.L315**

*Annual Report for the Period ... / An Bord Bainne, Irish Dairy Board.* Dublin: The Board. Annual. 1st Feb. to 31st Dec. 1973-  
**HD9275.I6A2**



*Annual Report (South Dakota. Animal Industry Board). Annual Report / Animal Industry Board.* [Pierre, SD?]: The Board. Annual. 1990-1991-  
**SF624.S8A55**

*Annual Review of Cell and Developmental Biology.* Palo Alto, CA: Annual Reviews Inc. Annual. Vol. 11 (1995)-  
**QH573 .A55**

*Ascot's Fish Breeder Directory.* Marlton, NJ: Ascot International Tropical Fish Databank. Quarterly. Oct. 1994-  
**SH155.5.A88**

*Biotechnology Report (Sha Tin, Hong Kong).* Shatin, NT, Hong Kong: Campden Pub. Ltd. Annual. 1994/95-  
**TP248.2.B5643**

*Boletín INCIENSA / Instituto Costarricense de Investigación Enseñanza en Nutrición y Salud.* Tres Ríos, Costa Rica: El Instituto. Three times a year. Vol. 1, no. 1- 1989-  
**RA191.C8B65**

*Bol. técn. Inst. Agron. [Boletim técnico Instituto Agronômico.]* Campinas, SP: Instituto Agronômico. Irregular. No. 62- 1980-  
**S192.S315**

*Bulletin / Association for Living Historical Farms and Agricultural Museums.* Fishers, IN: The Association. Quarterly. Vol. 22, no. 3 (Summer 1992)-  
**S549.U5L5**

*Caribbean Basin Commercial Profile.* Washington, DC: Caribbean Pub. Co. in conjunction with Caribbean/Latin American Action. Annual. 1994-  
**HF3311.8.C36**

*Central Research Institute For Jute & Allied Fibres. Annual Report.* Barrackpore, West Bengal [India]: The Institute. Annual. 1987-1989-  
**SB257.C46**

*Developments in Plant Breeding.* Dordrecht; Boston: Kluwer Academic. Irregular. Vol. 1-  
**SB123.D48**

*Energy Crops Forum [Computer*

*File] / U.S. Department of Energy, Biofuels Feedback Development Program at Oak Ridge National Laboratory.* Oak Ridge, TN: The Program. Fall 1991-  
**SB288.U5E55**

*Erdészeti lapok (Budapest, Hungary: 1992). Erdészeti lapok : az Országos Erdészeti Egyesület lapja.* Budapest: Egyesület. Monthly. Began in 1992?  
**SD217.H9E73**

*Food and Agriculture in Africa / ECA/FAO Agriculture Division.* Addis Ababa: The Division. Semiannual. Staff papers no. 1- 1991-  
**S472.A1F66**

*Food Trades Directory of the UK & Europe.* London: Newman Books. Annual. 25th ed. (1996)-  
**HD9011.3.F6**

*FSA Commodity Fact Sheet. Upland Cotton.* Washington, DC: U.S. Dept. of Agriculture, Farm Service Agency. Annual. 1995-  
**aHD9074.A7**

*FSA Commodity Fact Sheet. Extra Long Staple Cotton.* Washington, DC: U.S. Dept. of Agriculture, Farm Service Agency. Annual. 1995-  
**aHD9074.A72**

*Fur Age Directory.* New York, NY: Fur Age. Annual. 1994-  
**HD9944.U6F87**

*Die Futterwirtschaft in Deutschland.* Bonn: Bundesministerium für Ernährung, Landwirtschaft und Forsten. Annual. Wirtschaftsjahr 1990/91-  
**SF95.A1G4**

*Garden Gate (Des Moines, Iowa).* Des Moines, IA: Woodsmith Corp. Bimonthly. No. 1 (Feb./Mar. 1995)-  
**SB450.9.G38**

*Indonesian Food and Nutrition Progress.* Yogyakarta, Indonesia: Food and Nutrition Development and Research Center, Gadjah Mada University. Semiannual. Vol. 1, no. 1 (June 1994)-  
**TX360.I5I54**

*International Centre for Research in Agroforestry. Annual Report.* Nairobi,

Kenya: The Centre. 1991-  
**S3.I56**

*Irrigation Business & Technology.* Banning, CA: VERDEcom. Bimonthly. Began in 1994.  
**TC801.I77**

*Kachiku Kairyo Senta nyugyogyu hyoka hokoku = Bulletin of the National Livestock Breeding Center Dairy Sire and Cow Evaluation.* Fukushima-ken Nishigomura: Norin Suisansho Kachiku Kairyo Senta. Irregular. Began in 1993.  
**SF196.J3K33**

*A Kertészeti és Élelmiszeripari Egyetem közleményei = Publicationes Universitatis Horticulturae Industriaeque Alimentariae.* Budapest: Kertészeti és Élelmiszeripari Egyetem. Annual. 51. évf. (1987)- = Tomus 1-  
**SB317.5.K47**

*Malaysian Timber Bulletin.* Kuala Lumpur, Malaysia: Malaysian Timber Council. Monthly. Vol. 1, no. 1, (Jan. 1995)-  
**HD9766.M4M35**

*Mezs.* Riga: Mezavots. Monthly. '92, 1-  
**SD217.L35M48**

*Molecular and Cellular Differentiation.* Boca Raton: CRC Press. Quarterly. Vol. 1, issue 1-  
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*National Forest System, Reforestation and Timber Stand Improvement Report for the Fiscal Year ... / United States Department of Agriculture, Forest Service.* [Washington, D.C.]: The Service. Annual. 1984-  
**aSD409.N38**

*Nature Australia.* Sydney, NSW: Australian Museum Trust. Quarterly. Vol. 25, no. 1 (Winter 1995)-  
**Q1.A3A53**

*Nebraska Veterinary and Biomedical Sciences Newsletter / Cooperative Extension, Institute of Agriculture and Natural Resources.* Lincoln, NE: University of Nebraska-Lincoln, Department of Veterinary and Biomedical Sciences. Monthly. Vol. 23, no. 12

(Dec. 1994)-  
SF600.N42

*New Titles in Bioethics.* Washington, DC: National Reference Center for Bioethics Literature, Joseph and Rose Kennedy Institute of Ethics. Quarterly, with an annual cumulation. Began with May 1975 issue.  
Z6675.E8N48

*News from the Frontier.* Staunton, VA: Museum of American Frontier Culture. Irregular. Vol. 1, no. 1 (Fall 1985)-  
F232.S5N49

*Nut Grower.* Fresno, CA: Western Agricultural Pub. Co. Monthly. [Nov./Dec. 1994-]; Began with v. 1 (Sept./Oct. 1982).  
SB401.A45A17

*N.W.F.P. Agricultural University. Research Station. Annual Report.* Mingora, Swat.: N.W.F.P. Agricultural University, Research Station. Annual. 1986-87-  
S542.P18N84

*Phillippine Science & Technology Abstracts.* Manila, Philippines: Scientific Clearinghouse and Documentation Services Division, Science Promotion Institute, National Science and Technology Authority. Bimonthly. Vol. 1, nos. 4-6 (Aug. 1983)-  
Q127.P6P55

*The Professional Treater / British Wood Preserving and Damp-proofing Association.* London: The Association. Quarterly. Began in 1994.  
TA424.P76

*Research Report (International Service for National Agricultural Research). Research Report / ISNAR.* The Hague: International Service for National Agricultural Research. Irregular. No. 1-1993-  
S540.8.I58R47

*Resistant Pest Management [Computer File].* East Lansing, MI: Pesticide Research Center, Michigan State University. Semiannual. Vol. 5, no. 2 (Winter 1993)-  
SB957.R472

*Revista nicaragüense de entomología.* León, Nicaragua: Museo Entomológico Autónomo, Servicio Entomológico Autónomo. Four no. a year. No. 1 (enero 1988)-  
QL478.4.N5R48

*Scientia agricola.* Piracicaba, São Paulo, Brasil: Universidade de São Paulo, Campus de Piracicaba ESALQ/CENA. Three times a year. Vol. 49 (1992)-  
S15.S25

*Seminars in Avian and Exotic Pet Medicine.* Philadelphia, PA: W.B. Saunders Co. Quarterly. Vol. 1, no. 1 (July 1992)-  
SF994.2.A1S36

*Silva belgica.* Bruxelles: Société royale forestière de Belgique. Bimonthly. 96e année, no. 1 (janv.-févr. 1989)-  
SD189.S55

*Soil & Environment.* Dordrecht; Boston: Kluwer Academic Publishers. Irregular. Vol. 1- c1993-  
TD878.S65

*Soil Management CRSP Bulletin.* Raleigh, NC: Soil Management Collaborative Research Support Program, North Carolina State University. Irregular. No. 92-03-  
S599.9.T783T76

*Something to Grow On: Alabama's Ornamental Newsletter.* Auburn, AL: Alabama Cooperative Extension Service, Auburn University. Began with vol. 1, no. 1 (Jan. 1990).  
S4935.52.A13S66

*Statistical Review.* Sydney, NSW: Australian Meat & Live-stock Corporation. Annual. July 89-June 90-  
HD9428.A8A85

*Sugar Cane.* [High Wycombe, Bucks: International Sugar Journal Ltd.] Bimonthly. (May/June 1983)-  
SB226.S83

*TASPO Gartenbaumagazin.* Braunschweig: Bernhard Thalacker. Monthly. 3. Jahrg., Nr. 1 (Jan.-Feb. 1994)-  
SB10.G37

*Technovation.* Amsterdam: El-

sevier Scientific Pub. Co. Quarterly. Vol. 1, no. 1 (Feb. 1981)-  
HD45.T397

*Tissue Culture.* Sheffield, England: University of Sheffield Biomedical Information Service. Semimonthly. Vol. 1, no. 1 (Jan. 1980)-  
Z6663.T5T57

*Trade Policy Review.* Cameroon. Geneva: GATT, General Agreement on Tariffs and Trade. 1995-  
HF1615.4.T73

*Trade Policy Review.* Israel. Geneva: General Agreement on Tariffs and Trade. 1994-  
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*Trade Policy Review.* Pakistan. Geneva: GATT, General Agreement on Tariffs and Trade. 1995-  
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*O Trimestre / Serviço de Documentação e Informação.* Belém-PA, Brasil: Ministério da Educação, Faculdade de Ciências Agrárias do Pará. Quarterly. 1978-  
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*Tropiflora's Cargo Report.* Sarasota, FL: Tropiflora. Bimonthly. Vol. 1, #1 (Oct. 1991)-  
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*United Nations/FAO Committee on Food Aid Policies and Programmes. Report of the ... Session of the Committee on Food Aid Policies and Programmes / World Food Programme.* Rome: CFA. Semiannual. 23rd (25 May-4 June 1987)-  
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*Washington Technology Almanac.* Vienna, VA: TechNews Inc. Annual. Began in 1992.  
T21.5.M53W37

*The Webster Agricultural Letter.* Arlington, VA: Webster Communications Corp. Semimonthly. Vol. 1, no. 1 (Jan. 1, 1994)-KF1681.A15W43

*Weeds World [Computer File]: The International Electronic Arabidopsis Newsletter.* Nottingham, UK: Nottingham Arabidopsis Stock Centre.



Three no. a year. Vol. 1 (Nov. 1994)-  
QK495.C9W44

*West Coast Horse Review.* Beaver-

ton, OR: Skies America. Monthly.  
Vol. 32, no. 9 (Sept. 1995)-  
SF277.C35

*Missouri Farm.* Vols. 3-8, 1986-91.

*Poultry Science.* Vols. 39-62, 1960-83.

*Proceedings of the American Society  
for Horticultural Science.*  
Vols. 71-93, 1958-88.

*Soil Science Society of America Jour-  
nal.* Vols. 44-48, 1980-85; vols. 44-51,  
1980-87.

*World's Poultry Science Journal.*  
Vols. 17-36, 1961-80.



**Publications  
Exchange**

## Serial Gaps

The National Agricultural Library identifies gaps in the national collection through collection maintenance activities and patron requests. We would appreciate your donation of the following publications needed to complete NAL collections. If you have questions, contact:

Patsy Graves, (301) 504-7061  
TDD/TTY: (301) 504-6856  
FAX: (301) 504-5243; or  
Internet/E-mail:  
pgraves@nal.usda.gov

Send items to:

National Agricultural Library,  
USDA, ARS  
Gift and Exchange Program/PG  
Room 002G  
10301 Baltimore Avenue  
Beltsville, MD 20705-2351

*Aquaculture Association of Canada  
Bulletin.* Vols. 2 & 4, 1990.

*Boston College Environmental Af-  
fairs Law Review.* Vol. 13, 1985/1986;  
Vol. 14(1-3), 1987.

*Chimica Oggi.* Vol. 10(1/2), Jan/Feb  
1992; vol. 9(11), Nov. 1991; vol. 9(10),  
Oct. 1991; no. 6, June 1987; no. 6, June  
1986; no. 4, April 1986; no. 5, May 1984;  
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*Clinical Pediatrics.* Vols. 24(4),  
1985.

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ference.* Vol. 34, 1979; Vol. 35, 1980;

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*Proceedings. North Central Weed  
Science Society.* 1983, 1984, 1991.

*Revista Brasileira de Ciencia do  
Solo.* Vol. 13, 1989.

*Sydowia.* Vol. 40, 1988.

## Surplus Publications

The National Agricultural Library will provide the following surplus publications to any interested organization that regularly sends free publications to NAL, including most Federal, land-grant, and agricultural research institutions, and foreign exchange partners. Titles not requested will be purged six months after the initial listing.

If interested, please send an ad-  
dressed label with your request to:

National Agricultural Library,  
USDA, ARS  
Attn: Gift and Exchange/PG  
Room 002  
10301 Baltimore Avenue  
Beltsville, MD 20705-2351

Or call Patsy Graves, (301) 504-7061  
TDD/TTY: (301) 504-6856  
FAX: (301) 504-5243; or  
Internet/E-mail:  
pgraves@nal.usda.gov

*American Orchid Society Bulletin.*  
1978-94.

To request the following surplus  
publication, contact Dr. Peter Harris  
at the address given below:

*Canadian Entomologist.* 1963 to  
present.

Dr. Peter Harris  
Agriculture & Agrifood Canada  
Research Centre  
P.O. Box 3000  
Lethbridge, AB, Canada T1J4B1

## NAL Electronic Address Changes Slightly

The National Agricultural Library has begun using a new Internet and E-mail address. The new address adds a period between the *nal* and *usda*:

@nal.usda.gov

URL's in the Internet's World Wide Web (WWW) will also use the period between the *nal* and *usda*.

The previous address—without the period—will remain valid. Both addresses will continue to be used indefinitely, and messages will be received by NAL units and staff using either version of the address until further notice. The new address will help distinguish NAL addresses from other USDA agency addresses, as well as meet new address structuring guidelines for USDA.

—Joseph N. Swab

# NAL News



photo: J. Swab

(Above) Magdy El-Sayed, Judi Zidar, and Hend Fathalla work on the "Birds of Egypt" CD-ROM at the NAL work station for NATDP. For story see pages 21-22.



(Left) Kate Hayes, Coordinator of the Technology Transfer Information Center (TTIC); receives the Federal Laboratory Consortium's 1995 Outstanding Service Award from Pat Rodriguez (last year's winner) for her sustained support and service to the FLC. (For story see the next issue of ALIN.)

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Agricultural Research Service  
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**AGRICULTURAL LIBRARIES  
INFORMATION NOTES**  
ISSN 0095-2699

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## AGRICULTURAL LIBRARIES INFORMATION NOTES (ISSN 0095-2699)

provides a channel of communication to technical information specialists, librarians, extension workers, researchers, and scientists on agricultural information activities. Published 4 to 6 times per year.

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